AMERICAN MILK REVIEW

Volume 1 NEW YORK, OCTOBER, 1939 No. 3

Oppose Argentina Trade Agreement

Domestic Dairy, Farm and Livestock Groups Wage Strong Fight on Proposed Agricultural Tariff Concessions—Early October Milk Production Report

(From the Review's Washington Correspondent)

WASHINGTON, D. C., October 23.—The proposed trade treaty with Argentina was declared by witnesses who testified before the Committee for Reciprocity Information. at the public hearings on the treaty last week, to be a matter of far greater importance to the American livestock producers and dairy industry than the neutrality repeal debate in the Senate.

Appearing at the hearing in opposition to the treaty were seven United States senators, twenty-six members of Congress, representatives of the state governments of Minnesota and Kansas and twenty-eight national and state general farm, dairy and livestock associations. The necessity for a strenuous fight by these organizations against the treaty with Argentina was made more apparent when it was disclosed that of the twenty-nine items listed for concessions to Argentina by the United States, twenty-five were agricultural, dairy, livestock and poultry products and only four were industrial commodities.

It was stated by Congressman Pittenger that these hearings are important but everyone realizes that the New Dealers have their minds already made up, so that the protests that are made to the committee which is conducting the hearings will undoubtedly be ignored. It is apparently the Administration's policy to buy more agricultural products from South America in exchange for a larger South American trade in our industrial products. Senator Johnson of Colorado said that if concessions on agricultural commodities are extended, America will become largely an industrial country dependent on foreign sources for food supplies.

Department of Agriculture officials on the committee denied that the Argentina treaty would injure agriculture. George B. L. Arner, committee member representing the Department of Agriculture, said he doubted if there have been any concessions that have injured agriculture.

Several senators and representatives warned the committee that unless the State Department ceased cutting tariff rates on agricultural products, Congress would refuse to renew the Reciprocal Trade Treaty Act when it expires next spring. It is undoubtedly for this reason that Secretary of State Hull is hastening negotiations with South American countries, so that all the negotiations will have been completed before Congress can act.

Dairy Group Well Represented

The dairy industry was well represented at the hearings. The items listed for concessions to be granted Argentina were of comparatively minor importance—casein and Italian cheese. Neverless it was argued that tariff reductions on any of the various dairy products would affect adversely the entire industry.

In a discussion of the concessions on dairy products, Representative Horton of Wyoming stated that record production of milk during the last two years made it necessary for the federal government to purchase unmarketable surpluses of dairy products and to give them away to persons on relief. Yet this same government is contemplating action which would fasten low prices upon our farmers for many years as a result of cuts in duties. One of these products is casein. The present duty is 5 cents a pound. This duty was the subject of intense controvery in the Congress of 1930, when dairy farmers were lined up against coated-paper manufacturers who wanted to bring this product in at cheaper prices.

There are billions of pounds of skimmilk available in this country for casein production, said Mr. Horton. Yet the smaller creameries cannot afford to convert it into casein unless they can get a return at least sufficient to cover the processing cost. Manufacture of casein and dry skimmilk are alternate operations depending upon the price returns. If the price of casein is lower as a result of tariff concessions, there will be an excess in the dry skimmilk market such as will prove ruinous to skim prices.

The proposal in the Argentina treaty to reduce the American tariff on foreign-type cheese was strongly opposed by representatives of the Italian Cheese Producers' Association. A Casligliano of the Stella Cheese Co., Inc., said he represented twenty-two large cheese factories in the Middle West engaged in the manufacture of Italian cheese. The production this year was 20,000,000 pounds. He stated that there were factories in California, Illinois, New York, Pennsylvania and several other states manufacturing Italian cheese of various kinds. He figured that the small producers were making 10,000,000 pounds of Italian cheese this year.

Italian cheese factories operate in Italy and Argentina. When the war was on in Ethiopia, Italians were dumping cheese in the United States. If the tariff were reduced as proposed in the Argentina treaty it would result in reducing the price of Italian cheese in American markets at least 3 cents per pound. In view of this situation, Mr. Castigliano asked: "What will happen to our producers in this country? When reductions in tariffs on cheese from Argentina are made Italy is going to ask for the same concessions.

"Milk in Argentina costs one-third as much as in the United States, the processors paying 15 cents a pound for butterfat. Wages received by laborers in producing milk in Argentina are much less than here. Argentina can produce Italian types of cheese at 9 cents a pound. Therefor, why should we grant these people lower tariff rates?"

There was much opposition to the proposed cut in tariff rates on turkeys from 10 to 5 cents per pound.

September Milk Flow Off Sharply

For the country as a whole October 1 milk production per cow in herds kept by government crop correspondents averaged between 2 and 3 per cent lower than on the same date of 1938. Considering the prospects for some improvement in fall pastures as the result of

(*Continued on Page* 96)

There's Something In It!

There's something in THE REVIEW for every department in your organization. Legislative news and editorials for the executive; market statistics for the sales department; trade news for the plant operator; advertisements for the buyer and engineer; technical articles for the laboratory. Something of value every week for all.

AMERICAN MILK REVIEW

PUBLISHED MONTHLY BY THE
URNER-BARRY COMPANY
AT 173 AND 175 CHAMBERS ST., NEW YORK CITY
President, William C. Taber; 1st Vice President, Harold E. Taber; 2nd Vice President, F. A. Urner; Treasurer, Paul H. Taber; Secretary, Gordon Urner. The address of the officers is the address of this publication.

Gordon Urner - - - - - - - - - - Editor
Paul H. Taber - - - - - Associate Editor
A. C. Dingwall - - - - - Associate Editor
F. A. Urner - - - - - Advertising Manager
J. C. Taber - - - Asst. Advertising Manager

Chicago Representative
Guy W. Whitcomb
520 N. Michigan Ave.
Chicago
Phone: Superior 1042

Far Western Representative
J. A. Kendall
176 Arcade Annex
Los Angeles
Phone: Atlantic 1-7272

Domestic Subscription, $2.00 Per Year
Including copy of the annual Who's Who in the Butter, Cheese & Milk Industries published during the subscription year

NEW YORK, OCTOBER, 1939

Striking Dairy Month Record

THE first formal accomplishment report as yet possible of preparation by the headquarters committee which directed the activities of National Dairy Month happily shows that the countrywide drive to expand the consumption of milk and its products conducted during June this year achieved unprecedented success on all its fronts. Thus are all expectations amply confirmed.

The achievements recorded are strikingly presented in a review of the results and highlights of this season's campaign prepared by MILTON HULT, chairman of the committee and president of the National Dairy Council, just released from the Chicago headquarters of the latter organization.

In this summation MR. HULT interestingly outlines the immediate and sustained industry benefits realized by this intensified effort;

He stresses the gratifying broadening both in nature and extent of the cooperating groups;

He traces the drawing into the drive of the wholehearted cooperation of the nation's news and trade press; the radio; transportation systems; hotel and restaurant associations; federal, state, county and city officials; and many others.

He calls attention to the overwhelming industry approval, recorded by widely-disseminated questionnaires, of the continuation of a similar dairy products June program next year;

And he remarks the added value of the campaign as an important factor in furthering the eventual development of a long range and continuous national publicity program.

But it is, naturally, upon his actual statistical record of materially expanded consumption of milk and its products during the term of the drive that chief interest centers. Based upon available sales figures reported by the cooperating group organizations MR. HULT's compilation shows the following sales gains, June, 1939 compared with June, 1938:

Chain Food Stores

Butter	11.3%	Milk	14.2%
Cheese	31.2%	Cream	34.7%

Independent Food Stores

Butter	10%	Milk	15%
Cheese	35%	Cream	30%

Chain Drug Stores

Butter	20%	Milk	22%
Cheese	35%	Ice cream	24%

Chain Variety Stores

Milk	28.5%

Restaurants

Milk	10.6%

Elaborating further, the committee's report states that:

"A cross-section summary based on reports from thirty-three trade markets through state and local secretaries, Council units and distributors, showed in these markets the following average sales increases on dairy products during Dairy Month:

Milk	11%	Ice cream	12%
Butter	6%	Cheese	11%

"Supporting the already mentioned sales increases, the government report on apparent butter consumption showed 153,400,000 pounds for June, 1939 as compared with 139,700,000 pounds for the corresponding month of the previous year. This is an apparent butter consumption increase for the country at large of more than 13,000,000 pounds during June Dairy Month of this year over June, 1938. Analyzing all these figures, the results become all the more gratifying as they came on top of substantial sales increases made in last year's June drive over June, 1937."

And commenting on the constant growth of the ranks of active sponsors of and workers for nation-wide continuous dairy products promotion, MR. HULT draws some hopeful conclusions. He says:

"The opinion is spreading that an aggressive sustained dairy products campaign is the positive and constructive way to meet the challenge of under-consumption. It offers boundless opportunities for checking the inroads made by competitive foods and drinks. It will furnish the ways and means of greatly expanding educational activities as to the food value and economy of dairy products. Such a program carefully planned and effectively executed can easily lead to a more desirable level of per capita consumption of dairy products than now generally exists. This, in itself, would not only benefit those in the dairy industry but the health and well-being of the whole population."

Some Individual Group Figures

WELL in advance of the issuance of this Dairy Month Committee report, necessarily delayed by the time-consuming work of correlating data from the entire national front, the outstanding effectiveness of the whole effort was clearly foreshadowed by illuminating summaries of their collective operations released by a few of the more important participating groups.

The first of these, which was outlined in the August 23rd issue of the REVIEW, came from the offices of the National Association of Chain Drug Stores. Preliminary results attained by this organization were at that time outlined by F. J. GRIFFITHS, its executive secretary, as recording an excellent showing.

Participating in the chain drug store drive were, it was said, fifty-four companies operating over 2,600 individual stores in key locations throughout the United States. These, taken as a group, were reported to have experienced during June:

Twenty-two per cent increase in milk sales for the month compared with June, 1938;

Twenty-four per cent increase in cream sales;

Twenty per cent increase in butter sales; and

Fifty-three per cent increase in cheese sales.

Next came from the Washington office of the National Association of Food Chains the preliminary report on the outcome of their participation in this dairy-products-use-spurring drive from the standpoint of the country's chain food store companies. In this JOHN A. LOGAN, president of the organization, first stresses the importance of the aid, in any concerted campaign to broaden consumer interest in dairy products, afforded by a program of organized assistance to agriculture on the part of the retail group as a whole. Such a program has in recent years been carried out by the food chains, with active participation by companies operating roughly 35,000 stores.

Reviewing the particular problems presented in the marketing of dairy products early this season, MR. LOGAN tells of the request from the nation's milk producer groups to the organized food chains for assistance in moving surplus production into consumptive channels, and he outlines the many-sided moves for self help set in motion in all directions by the milk producing, processing and distributing industry elements.

Passing on to actual sales results of the member chain store companies, MR. LOGAN also calls especial attention to the fact that the increases recorded in June of this year are especially noteworthy when it is borne in mind that during a similar—but less comprehensive—drive in the same month a year ago, substantial increases in sales over June, 1937, were shown by the food chains.

The record realized by those chain food store companies co-operating in the program this year is reported as follows:

SALES RESULTS BY COOPERATING CHAIN FOOD COMPANIES

Commodity	Weighted Average Increase in Sales During Month of June, 1939, over June, 1938
Butter	11.3 per cent
Cheese	31.2 per cent
Canned milk	11.8 per cent
Fluid milk	14.2 per cent
Cream	34.7 per cent

Further dissecting the data into its component parts, MR. LOGAN makes the following highly interesting observations:

"BUTTER—Top increase on any of these dairy products was 99.27 per cent on butter reported by a company operating over 200 stores. Greatly varying conditions affected the ability of individual companies to increase their sales over June, 1938. Many companies have consistently featured butter in their advertising and promotional programs for the last two or three years. This, of course, made it more difficult for them to show large percentage increases, but, where the volume already was so heavy, even a slight percentage increase represented a very large volume of butter.

"Conservative estimates indicate that during the month of June the chain food store companies alone sold over six million pounds more butter than during June, 1938. This was a direct result of special efforts.

"CHEESE: Top increase was 42.7 per cent enjoyed by one of the larger companies. The weighted average increase for all food chains of 31.2 per cent indicates the results possible from joint efforts by organized producers and cooperating chain food store companies.

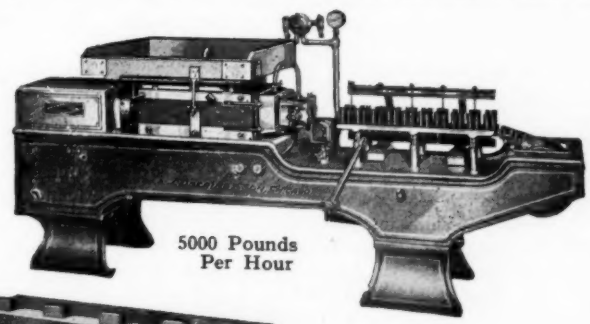
"FLUID MILK: In some respects the most startling results were obtained on fluid milk. Increases ranged up to 45 per cent in volume sales over June, 1938. One company attributed the large increase to: (1) Special promotional efforts; (2) Lower retail prices with a reasonable differential between store and wagon deliveries; and (3) The introduction of the paper container.

"CREAM: The weighted average increase in chain food stores' sales of 35 per cent indicates,

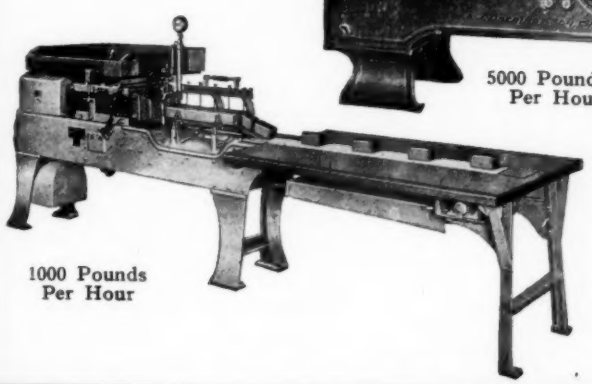
(*Continued on Page* 96)

"They've Won Their Spurs"
DOERING BUTTER PRINTERS

have acquired over the years a well-merited and nation-wide reputation for turning out butter prints speedily and flawlessly. For nothing has been left undone to make Doering Printers "tops" in converting bulk butter into any desired mold or size.



5000 Pounds Per Hour



1000 Pounds Per Hour

DOERING PRINTERS

are made in four sizes, producing from 200 to 5000 pounds per hour of perfect butter prints in quarters, halves or whole pounds.

SOLVE YOUR BUTTER PRINT PROBLEMS WITH DOERINGS

Interesting, illustrated Catalogue sent on request

C. DOERING & SON, INC.
1379 W. Lake Street CHICAGO

Doering
BUTTER PRINTING & PRINT ROOM EQUIPMENT

AUTOMAT "MULTIPLEX"
- Butter Wrapper -

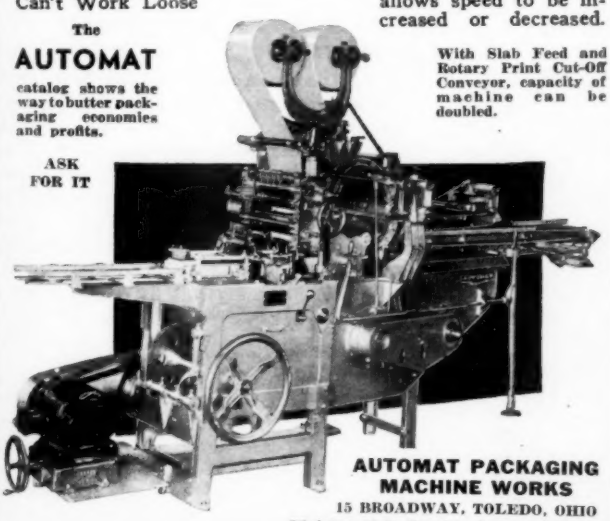
HIGH SPEED 3000 to 7000 pieces per hour
DEPENDABLE
LOCK WRAP
Can't Work Loose

Handles various sizes of prints and rolls. Varispeed Motor Pulley allows speed to be increased or decreased.

The **AUTOMAT** catalog shows the way to butter packaging economies and profits.

ASK FOR IT

With Slab Feed and Rotary Print Cut-Off Conveyor, capacity of machine can be doubled.



AUTOMAT PACKAGING MACHINE WORKS
15 BROADWAY, TOLEDO, OHIO
Division of C. Doering & Son, Chicago

AUTOMAT
AUTOMATIC WRAPPING & CARTONING EQUIPMENT

Hold State Conference

Mid-West Group Seek Uniform Quality and Inspection Standards In Fight Against Dairy Trade Barriers

Chicago, Ill.—At the instance of the Indiana Commission on Interstate Cooperation, a regional conference on dairy problems was held here on Oct[illegible]er 6th and 7th by the Council of State Governments at its headquarters, 1313 East 60th St. Wide attendance of legislative and technical representatives of mid-west dairy states was attracted to the sessions, whose primary purpose was the consideration of problems presented by the erection of barriers to free trading between the states in certain dairy products with especial emphasis placed upon sweet cream, condensed and evaporated milks.

At the conclusion of the conference, which was the latest of a series held under the general auspices of the Council of State Governments and with the active sponsorship of officials of the Agricultural Marketing Service of U. S. Department of Agriculture, a general resolution was adopted urging mid-western milk producing states to adjust quality and inspection standards on milk, cream and other dairy products to meet the requirements later to be promulgated in committee reports of the conference. It was likewise resolved that a call be issued for further conferences of the states involved and those in other milk producing areas, at which consideration would be given to the removal of other existing restrictions.

The General Resolution

The exact wording of this general resolution was as follows:

Whereas, The midwestern states represented at the Regional Conference on Dairy Problems are concerned with existing restrictions to the marketing of their sweet cream, condensed and evaporated milk for manufacturing purposes in other markets, and

Whereas, Such restrictions, though frequently intended to stabilize and raise the prices of these products in these other markets by limiting competition, are directed at quality and inspection standards adopted by the milk-producing states in the midwest, and

Whereas, The adoption of adequate and reasonably uniform quality and inspection standards by these states may greatly assist in overcoming these restrictions and open other markets to these products from the midwest,

Now Therefore Be It Resolved, That this conference urges the milk-producing states of the midwest to adjust their quality and inspection standards to the requirements hereafter set forth in committee reports of this conference.

Be It Further Resolved, That at such time as the states here represented have adopted reasonably uniform milk and cream sanitary and inspection laws or regulations for the adequate protection of health, a conference of these states and of states in other milk-producing regions be called by the Council of State Governments to consider the removal of other existing restrictions.

Comm. Finney Presents Background

The proceedings got under way with the presentation of the background of the problem by Hon. Frank Finney, Commissioner of Motor Vehicles and Chairman of the Indiana Commission on Interstate Cooperation. Pointing out that the attention of the Indiana commission had some time ago been called to the fact that out-of-state shipments of sweet cream from Indiana to hitherto lucrative eastern markets was being substantially curtailed by the adoption throughout the eastern portion of the country of state and municipal laws and regulations under the guise of the exercise of police power as public health protection, which in practice constituted unsurmountable barriers to interstate trade in milk and cream.

(*Continued on Page* 95)

F. G. PLOTT NAMED PRESIDENT

Now Heads Wisconsin Milk Dealers Assn. —F. W. Kelly Elected Director

F. G. Plott, general manager of the Green Bay, Wis., plant of the Fairmont Creamery Co., was recently elected president of the Wisconsin Milk Dealers' Association, Inc., succeeding M. Van Antwerpen, Milwaukee. Mr. Plott had been vice president and director of the Association since it was founded in 1935. He has been connected with the Fairmont Creamery Co. for nearly thirty years, twenty years of which have been spent in Green Bay where he has been division manager since 1921.

Frank W. Kelly, recently appointed president and general manager of the Gridley Dairy Co. of Milwaukee was elected a director of the Association. Mr. Kelly has been connected with Gridley Dairy for over thirty years and for many years has served as treasurer of the company.

AN OVERSIGHT

In our story of the dinner and celebration winding up the activities of the National Poultry, Butter and Egg Association convention at the World's Fair last week, our reporter inadvertently omitted the name of one of the donors to the prize awards.

The J. S. Hoffman Co. of New York City tendered, as a friendly gesture to the success of the affair, a twelve pound Clover Sharp Cheese, which was won by Ely Palisch of the New York Live Poultry Trucking Corp.

This and the other prizes that were given by several trade concerns attracted very considerable interest during the banquet.

ADOPTS SIX-DAY WEEK

Sagal-Lou Dairy Co. (N.D.P.) is now operating its retail and wholesale routes in New Haven, Conn., six days a week instead of seven. Every other week the drivers get off two full days making the work week average five and one-half days instead of six.

It was reported in New Haven that Sagal-Lou has not lost any customers to speak of due to the change. The routes service their customers double quantity on Saturday to carry them over until Monday.

TO DEDICATE ECKLES HALL

Invitations have been issued by the University of Missouri for the ceremonies attendant upon the dedication of Eckles Hall, the new dairy husbandry building at the Columbia, Missouri, institution, which will be held on Friday, November 3rd, at 1:30 p.m.

To Review Milk Case

Supreme Court to Pass Upon Federal Judges Decision Favorable to Trade In Chicago Anti-Trust Action

Washington, D. C.—The United States Supreme Court recently notified the Department of Justice here that it would review the decision by the Federal District Court of Northern Illinois dismissing indictments against fourteen corporations and associations and forty-three individuals charging conspiracy to restrain interstate commerce in milk. This case, which it will be recalled naturally was followed with closest attention by the dairy industry, marked a major reversal for the department in its so-called anti-monopoly campaign.

Granting the government's request for an early hearing in the milk case, the Court set arguments for November 13th. Likewise it made known that along with the case itself would be considered a contention that it did not have jurisdiction in the matter.

Woodward's Decision Industry Victory

The milk action involved indictments against the Pure Milk Association, sales and bargaining agency for more than 12,000 dairy farmers in Indiana, Illinois, Wisconsin and Michigan; Associated Milk Dealers, Inc., agency for major distributors in Chicago; the Milk Wagon Drivers' Union, officers of the Chicago Board of Health and other persons. They were charged with conspiring to fix milk prices, control the supply and suppress competition in the Chicago area.

Federal District Judge Charles Woodward, dismissing the action, held that the marketing of farm products had been removed from the jurisdiction of the Sherman anti-trust act of 1890, under which the indictments were returned. He commented that while the Sherman act "embodies the philosophy of individualism and unrestrained competition," the "tendency of later legislation has embodied the philosophy of collectivism and control of harmful competition."

ASK LOW-PRICE MILK DEPOTS

At a recent conference in the offices of William Fellowes Morgan, Jr., New York City Commissioner of Markets, representatives of the Milk Consumers' Protective Committee urged that depots be established in low-income areas of the city from which such consuming groups could obtain milk at prices 3@4c per quart below the prevailing store rate for the Grade B product.

The program as suggested by Miss Asho Ingersoll, executive secretary of the committee, suggested the establishment of the depots on city-owned property and their operation by private agencies. She estimated that roughly 450,000 quarts of milk could be distributed in such manner each day out of the total daily New York City milk consumption of approximately 3,500,000 quarts.

Those at the meeting were told that Mr. Morgan would confer in the matter with other city officials.

4 Modern Cold Storage Warehouses

in the world's Greatest Consuming Market

for the **STORAGE** of **BUTTER**
(NEW YORK—JERSEY CITY—NEWARK)

and all other **DAIRY PRODUCTS**

Proper Temperatures

Convenient Locations

Track Connections

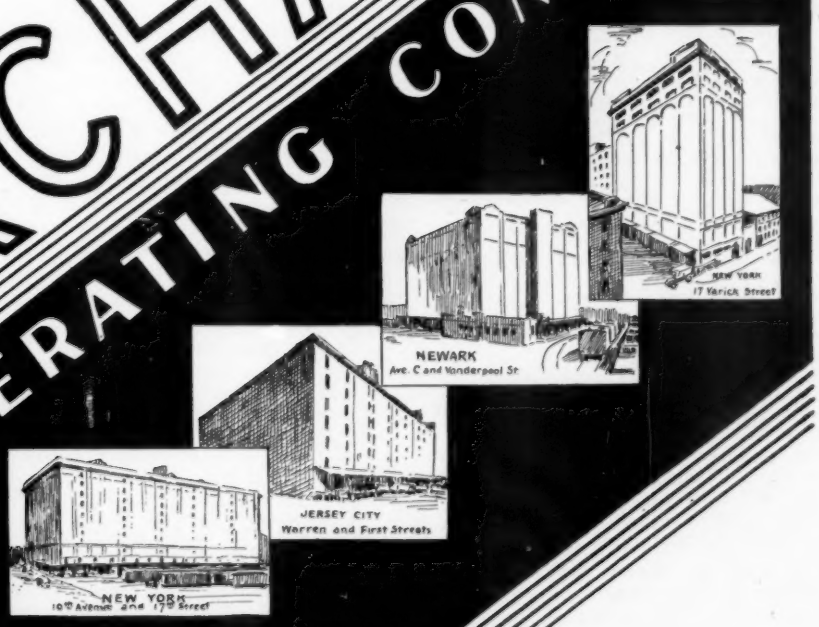
Storage-in-Transit Privileges

Financial Responsibility

General Offices:

17 Varick Street
New York
N. Y.

MERCHANTS REFRIGERATING COMPANY



Controversy Over Price

September New York City Area Milk Return Arouses Sharp Arguments—Eastern Flow Expanding Moderately

Much interest during the past week has centered on the mass of conflicting testimony adduced at the hearings on proposed revision of the federal-state milk marketing order for the New York City district, which were concluded here on Friday night of last week. Summary of the sessions will be found on another page of this issue. Keen attention likewise has been directed, as far as the New York milk shed is concerned, at the controversy—part of which was aired during these hearings and part in the issuance of several public statements from interested quarters—concerning the September uniform price for New York City milk.

La Guardia Denounces Action

Immediately on the announcement by Market Administrator E. M. Harmon of a September net blended return of $2.08½ per 100 lbs., strong criticism of the failure to reach the $2.15 rate, which formed the shooting-mark basis of Mayor F. H. La Guardia's August strike settlement plan, was voiced. The Mayor himself entered the lists with a sharp indictment of all concerned in putting out a $2.08½ figure, terming it—among many other colorful and equally unwarranted terms—"chiseling" of the lowest order. Archie Wright, head of the Dairy Farmers Union, immediately threatened to strike unless a minimum of $2.15 was returned.

Officials administering the federal-state agreement immediately replied with full explanations of the reasons underlying the September figure, pointing out that a $2.15 return was not guaranteed in the La Guardia agreement and laying at the door of the Mayor responsibility for the widespread misconception of the terms of the strike settlement.

Noyes Blames the Mayor

New York State Commissioner of Agriculture Holton V. Noyes, in a formal statement, said in part:

"It is not surprising that dairymen are disappointed because they will not receive the $2.15 per hundredweight price which they were led to believe they would receive from the publicity attending Mayor La Guardia's settlement of the recent milk controversy.

"Only a casual reading of the Mayor's agreement would reveal that it contains nothing to guarantee that New York milk producers would be paid $2.15. Unfortunately, however, few dairymen took the trouble to read the agreement and little effort was made by its sponsors to explain its provisions fully.

"All that was agreed to at the conference was to increase the prices to be paid for milk used in the four upper classifications. If sufficient milk was used in these four classes, it was expected, but guaranteed by none of the parties signing the agreement, that the final blend price to be paid would amount to at least $2.15.

"At the time of the settlement, I particularly emphasized that nowhere did the plan guarantee a definite price return."

In a later statement Commissioner Noyes likewise called for a drive to secure full dealer compliance with present orders. He asserted that if back payments, due the Producers' Settlement Fund from certain dealers, had been paid up in September, the month's producer price would have exceeded $2.15.

Sheffield September Return

Sheffield Farms Co., Inc., has announced it will pay members of the Sheffield Co-operative Producers' Association a return of $2.08½ for 3.5 per cent milk delivered during September. Certain association expenses, comprising 5 mills for association dues, 4 mills for bargaining agency dues and one mill for New York State publicity contribution, reduce the net cash price to producers to $2.07½. This latter compares with an August net cash figure of $1.95. These basic prices apply in the 201-210 mile zone.

League September Pool Price

The Dairymen's League Cooperative Association average net paid pool return to producers for September was $2.065 per 100 lbs. for 3.5 per cent milk in the 201-210 mile freight zone. The comparable August figure was $1.945. This includes an average city and location plus differential of .06c. Grade A premiums where earned are in addition. The figures include all deductions for Certificates of Indebtedness and service charges.

Flow Nearer Last Year

On the merchandising side the situation of fluid milk and cream at leading eastern distributing points rules a little more irregular though reasonably steady on the surface. Price ranges as between various sections display a wide spread, and here and there the burden of surplus has been somewhat more pronounced. Advices as to the eastern flow continue very spotty, with some sections leveled off and other points coming up more rapidly. The total volume of eastern production appears to be running closer to the same time a year ago.

New York City approved cream has been reported held in a general $20.00@20.75 range per 40-quart can for spot wholesale business.

New Jersey approved cream has been reported selling at all prices from $14.00@16.00 per 40-quart can up to $17.50@19.50, the upper ranges only being possible to reach on the movement of finest qualities in regular channels.

Surplus western and eastern cream moving at permitted eastern distributing points has been reported selling in a full range of $13.50@15.00 per 40-quart can as to quantity, quality and territory, here and there some lots available lower.

Philadelphia Generally Steady

	Receipts Rail & Truck 40-Qt. Cans		
	Milk	Cream	Cond
Wk. ending Oct. 14, 1939	158,851	3,577	1,987
Wk. ending Oct. 7, 1939	161,201	3,537	1,381
Wk. ending Oct. 14, 1938	142,447	3,372	1,751
Since January 1	6,293,705	212,033	112,349
Same time last year	5,887,381	195,484	109,385

In the Philadelphia district fluid cream has held usually steady with a fair clearance. The week's reported wholesale business in Pennsylvania approved goods has ranged $13.50@15.00 per 40-quart can.

Boston Ruling Steadier

	Receipts Rail & Truck 40-Qt. Cans		
	Milk	Cream	Cond
Wk. ending Oct. 14, 1939	113,641	8,686	1,478
Wk. ending Oct. 7, 1939	113,160	10,386	999
Wk. ending Oct. 14, 1938	110,466	10,265	1,237
Since January 1	4,624,805	444,096	65,582
Same time last year	4,470,374	452,964	67,097

Fluid cream displayed a rather steadier situation in Boston during the week with a usually reported open market wholesale range of $14.00 @15.00 per 40-quart can, small lots up to $16.00. Most owners of western surplus cream have been reported asking 13@15c over Chicago 92 score butter for prompt shipment to the Boston district.

CONCENTRATED MILK MARKET

Asking Prices Supported But Spot Demand Has Slackened Sharply

Well sustained asking prices on the basis of favorable statistics still feature the situation in concentrated milks, though trade has lately quieted down markedly in most leading lines under the latest advances. However, a fully confident attitude usually prevails on the part of the manufacturing trade as a result of the relatively light reserve supplies and the failure of production to begin to expand to any material indicated figure.

Evaporated case goods of the nationally advertised brands are listed at $3.10 for carlots here, and most miscellaneous packers are holding firmly at $2.95 on a carlot basis. It is doubtful if any goods could be obtained on the open market at any concessions. However, actual trading holds highly restricted, with the situation disturbed by relatively low-priced retail levels prevailing in certain quarters.

Sweetened skimmed condensed in bulk continues unchanged at 5¾@6c for carlots, with cars of sweetened whole condensed meeting quiet inquiry at irregular figures ranging, say, 8¼ @9c.

A very firm holding of stocks still is in evidence in dry skimmilk for human consumption. Both spray and hot roller process goods are not reported currently available on open market business below 10c, though, of course, some lines taken on previous contracts are being currently delivered at lower figures. Spot demand has quieted down considerably in all quarters, with both buyers and sellers operating as cautiously as possible. There is general unwillingness among the latter to take on forward business at existing rates.

Hot roller process goods for animal feed has lately lost tone very slightly under lighter buying interest, though in general asking prices are sustained at an 8½c basis for carlots.

Dry whole milk well supported as far as asking rates are concerned.

Case Goods—(Prices f.o.b. New York City. Usual trade terms 2 per cent discount 10 days, or net 30 days). Sweetened condensed whole milk, 14 oz. tins, 48 to case, U. S. Standard, advertised brands, —$5.00; 24 to case, —@$2.50; other brands, 48 to case, —@$4.50; 24 to case, —@$2.25. Evaporated whole milk, 14½ ounce tins, 48 to case, advertised brands, —@$3.10; other brands, —@$2.95; 6 oz. tins, 96 to case, advertised brands, —@$3.10; other brands, —@$2.95; 6 oz. tins, 48 to case, advertised brands, —@$1.55; other brands, —@$1.42½; 8 lb. tins, 6 to case, advertised brands, —@$3.10; other brands, —@$2.95.

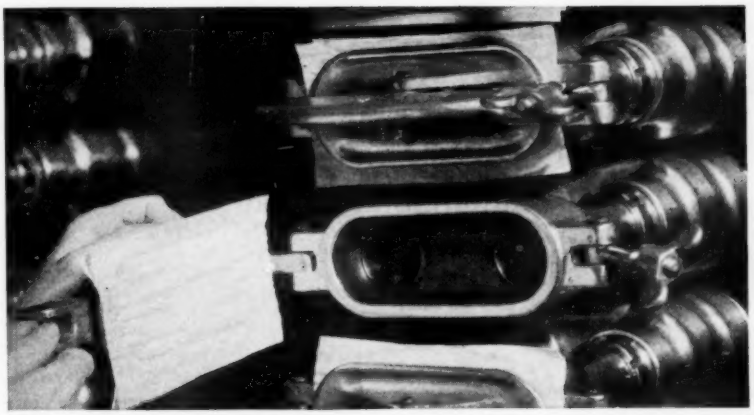
Bulk Goods—(Prices f.o.b. New York City. Known marks net; on other brands usual trade terms, 1 per cent discount 10 days or net 30 days.) In barrels, 700 lbs. gross weight, sweetened skimmed condensed milk, 23 per cent or more total milk solids, small lots, per lb., 6¾@7c; general offerings, car lots, per lb., 5¾@6c; sweetened whole condensed milk, small lots, per lb., 9¼@10c; general offerings, car lots, per lb., 8¼@9c.

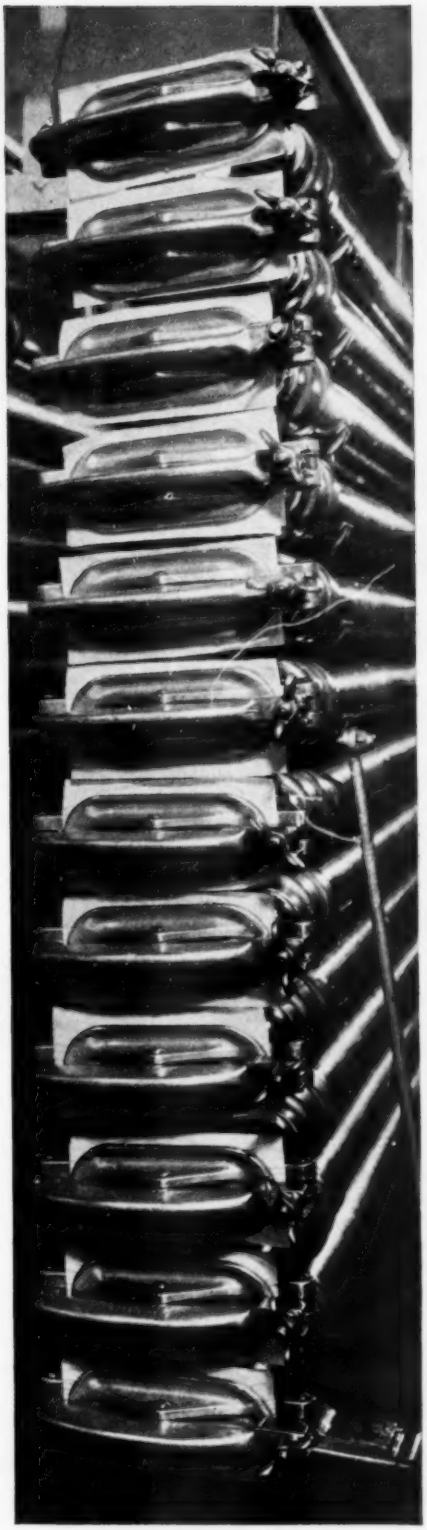
Bulk Goods—In 40-quart cans: Unsweetened plain condensed skimmilk, f.o.b. N. Y. State factory, per can, $—@—; unsweetened plain whole milk condensed, f.o.b. N. Y. State factory, 10 per cent butterfat, per can, $6.38½.

Dry Skimmilk—(Prices f.o.b. New York City. Goods for human consumption usually subject to 6 per cent discount to jobbers 10 days or net 30 days; goods for animal feed usual terms net cash.) In barrels; advertised brands, highly soluble in cold water, small lots, 10¼@11c; carlots, —@10c; other brands, highly soluble in cold water, small lots, 9½@10½c; carlots, 9@9½c; hot roller process, known brands, human consumption, bbls., small lots, 10@11c; carlots, bbls., —@10c; other brands, human consumtionn, bbls., small lots, 9½@10½c; carlots, 9@9½c; animal feed, small lots, bags or bbls., 8¾@9½c; carlots, 8⅝@8½c.

Dry Whole Milk—(Prices f.o.b. New York City.) In barrels advertised brands, small lots, 20¼@21c; carlots, —@20c; other brands, small lots, 19½@20½c; carlots, 19@19½c; hot roller process, small lots, 18½@19½c; carlots, 18@18½c.

C. W. BURCKHALTER, INC.
Distributors of
MILK PRODUCTS
156 FRANKLIN ST. NEW YORK





Seal it with a Patapar Gasket

Gaskets made of Patapar Vegetable Parchment make ideal seals for cleanout ports. They are *insoluble,* so cannot be weakened by the flow of the milk. They're remarkably strong, and provide a tight, snug-fitting closure. Sanitary and economical, too.

Patapar Milk Can Gaskets Prevent Leakage

A simple way to protect shipments of milk is to use gaskets of Patapar. They prevent milk from leaking out or from churning in the can top. And they keep dust and foreign matter from sneaking in.

Patapar Milk Can Gaskets come in sizes to fit standard cans, and they cost but a fraction of a cent per can.

We will gladly send you full information about Patapar, and its use as gaskets. When writing, tell us the application you have in mind.

Paterson Parchment Paper Company
Bristol, Pennsylvania

West Coast Plant: 340 Bryant Street, San Francisco, California
Branch Offices: 120 Broadway, New York, N.Y. • 111 W. Washington St., Chicago

*Patapar Vegetable Parchment

*(Reg. U.S. Pat. Off. & Foreign Countries)

Strong when wet...grease-proof, too

Our Changing Food Habits

An Interesting Analysis of the Status of the Dairy Industry in Relation to Current Major Trends in the Consumption of Foodstuffs

(By M. O. Maughan, Industry Representative of The Dry Milk Industry)

AT THE Food Technology Conference recently held at the Massachusetts Institute of Technology and attended by food authorities from twenty-six states and four foreign countries, is was disclosed that six major trends in food consumption are taking place.

1. A decrease in the consumption of cereals. (Pronounced)
2. A decrease in the consumption of meats. (Medium)
3. A shift in the consumption of fruits. (No increase or decrease—For example, apples down; oranges and other citrus fruits up.)
4. An increase in the consumption of sugar. (Very pronounced—Reaching a high point in 1930.)
5. An increase in the use of vegetables. (Pronounced)
6. An increase in the use of dairy products. (Slight; about 6 per cent in thirty-eight years; from 760 lbs. to 810 lbs. basis.)

(These trends cover the period from 1900 to 1938.)

In the case of dairy products, it is significant to note that while the grand total increase was only slight, the changes within the dairy products group are showing some rather interesting and startling developments.

The Dairy Products Consumption Record

From government figures, covering the past eleven years, furnished by the Bureau of Agricultural Economics of the Department of Agriculture, it is shown that butter consumption per person has gone down a little, likewise fluid milk. While the drop in each of these is only slight, it is however sufficiently large to cause some concern, particularly since the government now says, "use butter or oleomargarine that contains added vitamin A." (See their folder number 14 published by Children's Bureau, United States Department of Agriculture in cooperation with Bureau of Home Economics of the Department of Agriculture.) Also, since the birth rate of our country is slowing down and the number of children (they being the big milk drinkers) is decreasing. It is estimated that our population in this country will reach its peak between 1950 and 1960. Births are now 20 per cent less than eighteen years ago.

All this means a rapid increase in the percentage of old people as compared with the present percentage relationship between old and young people in this country. It is estimated that a child consumes at least twice as much fluid milk as an adult. Therefore, if our number of children actually decreases, fluid milk sales will suffer unles we do more than we are doing now to increase sales per person, particularly among the adults. Dr. O. E. Baker of the U. S. Department of Agriculture says "Enrollment in the first grade of the public schools has been on the decrease since 1930."

The figures show further that ice cream consumption increased 3 per cent; cheese 29 per cent; and evaporated milk exactly 50 per cent per person in the past eleven years; namely, from 1928 to 1938, inclusive.

Several questions immediately arise in one's mind, some of which are these: "What are we going to do about it, if anything?" "Is this present shift in the case of dairy products a sound one and to be encouraged?" "If not, what can be done?" These are only a few of the many questions.

M. O. MAUGHAN

The Fallacy of Internal Competition

At the outset it seems to me that no one in the dairy industry should cry about ice cream sales being up, or cheese sales being up, or evaporated milk sales increasing. The more "ups" we have in the use of the various genuine dairy products, the better. To me it seems we should be crying about the "downs", namely butter and fluid milk. Some of us have done a lot of kicking about evaporated milk sales going up, and I am beginning to wonder if we hadn't better change our thinking and mend our approach to this problem. Some of us have been like the golfer who is constantly hoping that his competitor will do poorly, concluding thereby that he himself will gain. Isn't this shortsighted? Doesn't the real solid sound-thinking golfer think about his own score, striving constantly to make better shots himself and thereby do a more constructive job himself? He isn't worried so much about the other fellow as he is concerned about his own progress, and isn't this a sound procedure?

Right here someone might say, "Your comparison isn't a good one because fluid milk and evaporated milk are so highly competitive that they can't go along side by side like golfers. If a consumer uses one of these it means she automatically cuts down on the other one to a similar extent." But is this true? Can't the public use more fluid milk and also more evaporated milk even though they are competitive? Let's see.

Now, for example, the nation is using billions of bottles of soft drinks in place of (to some extent) fluid milk, buttermilk, chocolate milk, etc. Mrs. Consumer is using more of these soft drinks each year. Fluid milk suffers. According to the Chain Store Research Bureau, as reported in the *New York Times* on July 15, 1939, the volume of sales of cola drinks and fruit juices was $700,000,000 in the pre-war years. Now it has risen to a total of over $2,000,000,000 per year. This is an increase of approximately 200 per cent. Can this be blamed on evaporated milk? Of course not. Here is a market that fluid milk is losing largely because the fluid milk branch of the dairy industry is thinking too much about evaporated milk competition and too little about sound merchandising and advertising of their own products in a big, constructive way.

Failure to Capitalize on Health Angle

Another point. All food authorities say "Use more dairy products." They urge less consumption of meat, sugar, and some other items and more consumption of *all* dairy products. They urge it because it means greater health and greater economy. What better reasons do we need to stimulate us to push *all* dairy products? Let's not get quarreling over a little bit of business within our own industry and in the meantime lose big opportunities which competing industries are now taking.

Another illustration, this one regarding cooking: "Cook with beer." "Use this or that branded fat product in your cooking. Here are cases where the dairy industry is losing out, to some extent at least, to these competing products. They are growing very rapidly. Instead, the public should be cooking with more fluid milk, and evaporated milk, and butter. Why don't they do it? Here again we sometimes quibble within our own industry over the proverbial "needle in the haystack" and let vast outlets slide from our reach.

I am sure some readers are now saying, "But wait a minute, let's think of the economics of this thing. Let's think about labor costs and raw material costs, etc. Let's get down to earth. Fluid milk is losing because of high labor costs

and relatively high raw milk costs." I agree. It seems to me that fluid milk is unjustly penalized, penalized in comparison with other products both inside and outside the dairy group.

As to Delivery Cost Comparisons

The other day I stood on the streets in New Orleans and saw a soft drink truck pull up to the curb. I talked to the operator of this truck. He said, "I have 200 cases on this load; each case carries 24 bottles." This means a load of 4,800 bottles. Contrast this with a wholesale milk route delivering only 1,800 bottles—about one-third as much. Yes, I'll admit there's a difference between soft drinks and milk, but not such a difference as is indicated in the relative costs of distribution. In Memphis the average of one soft drink load is 250 cases per day per route and the average number of stops is betwen 200 and 250 per day. A reasonable wholesale load of milk in most cities is 50 stops a day with an average of 3 cases per stop. Unions, small loads, and a few other things have sent the cost of delivery of fluid milk too high. According to President Montague of The Borden Company, their average wholesale route salesman in Chicago receives $79.95 per 6-day week (Borden's figure for March, 1939) while their men on retail route receive an average of $52.82 per 6-day week (during February, 1939). This appears to be considerably higher than for work in similar lines. The cost of distribution of milk in most cities must come down.

In a personal interview recently with William Green, President of the American Federation of Labor, he stated that wage scales must be about the same in competitive industries. For example, he stated that a carpenter, a bricklayer, and a steel worker should have about the same wage. If this be true, then wage scales among men who sell fluid milk, store clerks and others who sell evaporated milk and soft drinks, etc., (because they are just as competitive as the services of the carpenter, bricklayer, and steel workers) must be somewhat similar with due allowance for working hours and one or two other things. Now they are entirely out of line and balance with each other.

Again quoting Mr. Montague, in his presentation before the National Temporary Economic Committee: "Labor costs of a can of evaporated milk are less than a cent while the labor cost of processing and delivering a quart of fluid milk in New York City is almost five cents." He points out that evaporated milk has a two cent advantage in raw milk cost, which, plus the four cents difference in labor cost, gives evaporated milk an advantage of six cents.

Furthermore, a worker inside a fluid milk plant should expect about the same as a worker in an evaported milk plant or in a soft drink plant, etc., with due allowance for living costs in the city compared with the country, etc. Here, too, they are out of line. All told, it will take time to get squared around but it must come.

Fluid-Manufacturing Costs Unbalanced

Then, too, there is the cost of Class 1 fluid raw milk. It is either too high or the cost of milk for the condensery and for other dairy factories is too low. Maybe it's a case of both being out of line. As Mr. McInnerney, president of National Dairy Products Corporation, said in his presentation before the National Temporary Economic Committee: "there must be a more normal balance between Class I milk and milk used for manufacturing purposes." As it is now, the difference is too great. A more sound economic relationship should exist between the two.

It is my opinion that if the cost of fluid milk to the housewife would stay around ten cents to twelve cents per quart then she would use a lot more of it. I realize some surveys and lots of milk dealers do not agree with this thought. But with labor costs properly adjusted, and raw milk prices properly balanced, fluid milk could easily sell at this figure.

Necessity For Cooperative Effort

In the meantime, it would seem that less emphasis by the fluid milk man against evaporated milk would be advisable, and instead of this competitive spirit within the industry growing, it seems the fluid milk men could well turn their efforts more to holding and regaining markets now being taken by outside industries less basic to the health of the nation and to the pocketbook of the consumers.

In short, this is a plea for less selfish competition within the industry, but instead for an understanding that even though there is competition between some of our products we can go further by constructive selling, just as the auto industry is doing, than by fighting negatively among ourselves, which successful industries refuse to do. Let's work for proper readjustments rather than for elimination of our competitors; also toward more constructive merchandising.

Then we will see fluid milk sales increasing, along with those of ice cream, cheese, and evaporated milk.

Butter Problem Challenging

As for butter, their problem is a tough one. Internal competition seems to keep them from doing very much constructive work as an industry. They are greatly in need of research work to prove the superior merits of butterfat over other fats; they need good advertising and publicity and they need a lot of other things. During the past five years (1934-1938, inclusive), the butter industry lost approximately $500,000,000 which would not have been lost if they could have held the price of butter to the average of the preceding five years. These preceding five years were not banner years for agriculture, in fact quite the opposite. They were the years during the darkest days of the depresson. But the drop during the past five years (1934-1938) was far greater than the average drop for all dairy products. Why was it? The butter problem is a challenging one.

All told, the total dairy trend is reasonably favorable. It is upward. However, because of the outstanding health qualities of dairy products and their relative economy in the diet, the increase in consumption should be far greater than 6 per cent in 38 years. At this rate, it will take over 600 years to double the consumption of dairy products.

Plainville, Mass.—Allied Dairy Stores, Inc., was recently incorporated here with 500 shares no par stock. Incorporators: Kenneth M. Stevens, Abington; Gavin Wright, Attleboro, and Dorothy Turpel, Braintree.

Pick-ups—Here and There

Brevities Noted By A Review Representative As He Gets Around, In, And About The Milk Plants

Progesses

QUAY OWENS, Superintendent of V. T. Smith Dairy in Dubois, Pa., told recently of a rather unique sales campaign to stimulate the dairy's sale of cottage cheese, buttermilk and chocolate milk. Before the campaign was launched V. T. Smith wrote out and signed the checks for various amounts from $12 down to $2, five in all. It was explained to the driver salesman that those who sold the greatest volume of these three items would receive the checks, each one of whom would fill in his own name depending upon how he ranged in sales for the month. Mr. Owen explained that the drivers would observe daily the posted checks when they went to and from the plant. He further added that by-products made in their dairy were the best business-builders that they had, especially cottage cheese. One man in the plant is a specialist and is directly responsible for the quality and manufacturing of cottage cheese. No "come-backs" are used in the manufacture of any dairy by-products at Smith's dairy. The returns are separated and the cream sold to a local butter-making plant.

Owens stated that many new milk customers were traceable directly to their first purchase of V. T. Smith's cottage cheese or butter. Customers, he added, are more critical about the quality of dairy by-products than they are about milk and cream.

V. T. Smith's growth in the milk business has been steady and consistent. New additions to the plant were built and equipment added as their volume expanded. The original wooden frame building is still standing and now used as a garage located at the rear of the modern dairy with its up-to-date equipment. While not in such good health as formerly, Mr. Smith has delegated much of the responsibility for the firm's operation to Quay Owens, who is continuing with the same policies of progressive yet conservative expansion. In order to provide for future growth V. T. Smith purchased two properties adjacent to the milk plant upon which at the opportune time an enlarged plant may be built with a frontage on two streets.

On His Own

WHEN Otto Anderson was called on recently at his newly acquired Modern Dairy in Xenia, Ohio, he remarked that he had formerly been with one of the large dairy corporations. Speaking about his plant Anderson said, "When I worked for the other fellow I would think that I could stick such a plant as this in my vest pocket." Now, in business for himself with the prosperous two-route dairy in Xenia, he says that he is doing fine. While small, this dairy is complete in every detail, enabling Otto to put out high-quality milk which is responsible for a steady increase in volume. With many friends and relatives in Xenia, Otto Anderson has many unseen salesmen "plugging" to boost his business.

Frosted Foods

ACCORDING to a recent statement from The Philip Ritter Co. in New York City there are over 400 separate corporations in operation for the purpose of processing or handling of frosted food products. Statistics now show that while less than 100,000,000 pounds of frosted and frozen foods were used during 1935, it is estimated that in the year 1939 no less than 500,000,000 pounds will be consumed in the United States.

SofKurd

AS one of the means to publicize SofKurd, Vitamin D milk, the Hamilton Milk Co. (Borden) in Columbus, Ohio utilizes the medium of road-side signs such as one here illustrated. In striking black and white contrasts these signs on the approaches to Columbus attract much attention to this special grade of milk.

SofKurd milk is prepared by a chemical process in which there is a rearrangement of the minerals in the curd thereby, according to claims advanced making it more easily digestible for infants and invalids. It is being recommended also for normal adult consumption. This special milk is further fortified by the addition of Vitamin D.

Head-work

OFTENTIMES milk dealers able to buy trucks and other accessories for their milk business to better advantage outside of their home towns are adverse to such a procedure. Appreciating the value of local goodwill far-sighted milk dealers prefer to buy at home rather than make savings by doing business elsewhere, reasoning

that officials and employees of the local firms will reciprocate by purchasing their dairy products and spread the word of good-will among their friends.

Loyal community sentiment is quite strong in some sections, and thoughtful dairy plant operators capitalize on local good-will by patronizing their brother business men.

Sheffield

THIS attractive milk concentrating and shipping station is operated by Sheffield Farms, Inc., at Howard, Pa., just east of Bellefont. After the farmers unload their milk it is pre-cooled and shipped in either tank trucks or tank cars for speedy delivery to city milk processing

plants. Characteristic of most shipping stations operated by eastern milk firms such plants present an attractive appearance with the blue-gray and white paint. This color combination is almost as common on eastern milk depots as the popular red on farm barns.

Taste Thrill

DURING a recent enjoyable visit with Russell Gage of the M. & R. Dietetic Laboratories, the subject of homogenized milk came up for discussion. He voiced his opinion that the biggest selling point for "homogenized" is the taste thrill rather than stressing the more or less questionable claims of having soft curd.

"Russ" Gage, who has made an extensive study of soft curd milk, cites that so far there is no clinical evidence to substantiate any claims for curd softening by the homogenizing process. To maintain public confidence in milk it seems that Gage's point is well taken. Distributors should not make claims for their product which are not supported by medical or clinical evidence.

Technology

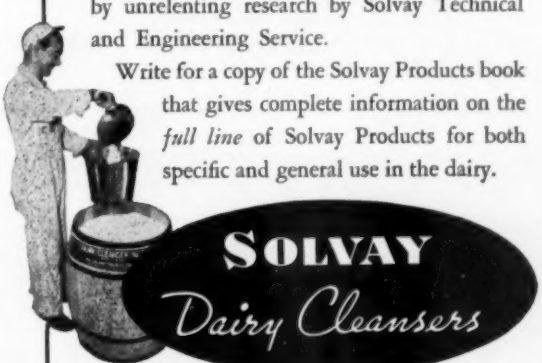
AT the Second Conference of Food Technology held at the Massachusetts Institute of Technology in Cambridge, Mass., recently, Loomis Burrell of the Cherry-Burrell Corporation traced the development of heat transfer equipment in dairy work. At this meeting food technologists in other industries obtained a broader vision of the technical developments in the dairy industry. Our industry likewise obtained some very favorable publicity.

Modern Dairy Practice includes the use of SOLVAY CLEANSERS

Solvay Dairy Cleansers are down-to-earth, time tested and proven products for every dairy requirement . . . a reputation they have *earned* in large and small dairy processing plants all over the country.

One important reason for this excellent reputation is that Solvay Dairy Cleansers are modern cleansers . . . cleansers that have been kept abreast of constantly changing dairying practices . . . cleansers constantly modernized by unrelenting research by Solvay Technical and Engineering Service.

Write for a copy of the Solvay Products book that gives complete information on the *full line* of Solvay Products for both specific and general use in the dairy.



SOLVAY SALES CORPORATION

Alkalies and Chemical Products Manufactured by The Solvay Process Company

40 RECTOR STREET NEW YORK, N.Y.

BRANCH SALES OFFICES:

Boston Charlotte Chicago Cincinnati Cleveland
Detroit Indianapolis New Orleans New York
Philadelphia Pittsburgh St. Louis Syracuse

Forsgate Farms Produces Its Own Eggs For Retail Routes

"Gentleman Farm" in Nearby Jersey Develops Into a Substantial Commercial Institution Now Serving Dairy Products and Eggs to Many Communities

Pasteurizing and Bottling Building

WHILE it is no novelty for milk firms to sell eggs on retail milk routes, it is somewhat of a departure for a dairy to maintain its own poultry farm to produce eggs for sale on its own routes as in the case of the Forsgate Farms located in Jamesburg, four miles from Cranberry, N. J. In the past, poultry operations on the Forsgate Farms have been more extensive than they are at present, but even today approximately 6,000 layers are maintained during the winter to produce sufficient eggs for the demand.

So well recognized is the quality of Forsgate Farms eggs that customers at all times are said to be willing to pay a premium over general retail prices. Depending upon

Principal Forsgate Farm Products

the season of the year premiums range from five to ten cents a dozen.

In round numbers 20,000 chicks are hatched, brooded and raised either to maturity for laying purposes or to be sold as broilers on the wholesale markets. The pullets are closely culled, and only those that show the characteristics of becoming good layers are kept for future layers.

Hatching baby chicks starts in February and a batch of new chicks is taken off each week until a sufficient number has been obtained. This procedure makes possible the start of pullet-laying just at a time when the old hens are going into moult and cutting down in their egg production, thus insuring more uniform production throughout the year.

Strive For Production—Demand Balance

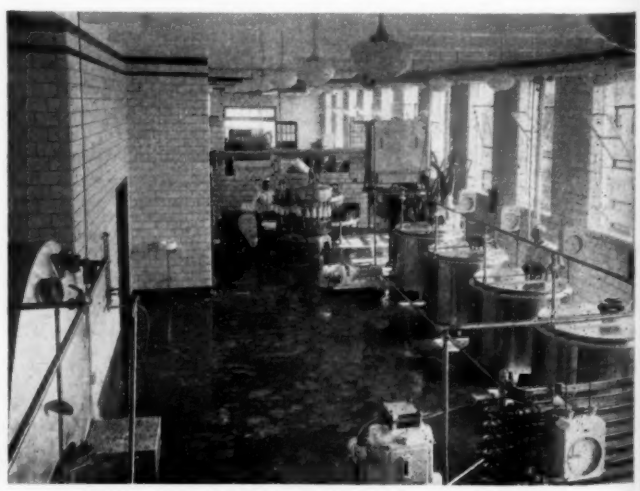
In discussing the subject of "peaks and lows" with Farm Manager Matthew R. Whelan recently, he stated that through all seasons of the year their production just about balances the consumer demand on their retail routes, and that it is a fixed policy at Forsgate Farms not to procure eggs from sources other than their own. During the pullet-laying season a price differential of about eight cents usually exists to make up for the smaller size of the pullet eggs.

As a general rule eggs produced on the Forsgate Farms are sold on the retail routes not later than two days after they are laid. After studies on egg producing costs were made over an extended period of years the management of this farm found that their most profitable egg and poultry operations existed when the laying flocks were maintained at a total of approximately 6,000 birds.

In past years with poultry operation on a much larger scale than they are today it was found from experience and the keeping of cost records that with the bigger flocks, and the attendant dressing and marketing of many more birds, the poultry division did not yield satisfactory profits. Today no special effort is made to expand the poultry activities. The sale of eggs on the routes during recent years is viewed more as a customer accommodation than as a source for additional profit. It may be readily seen that customers accustomed to high-quality cartoned fresh eggs, and top quality dairy products are not readily won away by competitive milk distributing firms.

Many Milk Routes Operated

At the present time bottled milk and cream is sold on twelve retail and wholesale Forsgate routes and, in addi-



Modern Equipment Insures Forsgate Quality

tion, on twenty-eight routes operated by other independent distributors. Forsgate routes proper serve a number of communities including Cranberry, Princeton, New Brunswick and others in the surrounding vicinity.

Independent dealers are not required to load up at Forsgate Farms under the service which the dairy renders. Large insulated trucks convey the bottled pasteurized products from the dairy to points most convenient for reloading to the trucks operated by the independent distributors. Forsgate sells from its own routes in addition to special Guernsey milk, regular pasteurized, chocolate milk, cottage cheese, ice cream, butter and eggs.

A separate building houses the ice cream plant, where a high-quality product is made for which a reputation for quality has become well established in central New Jersey.

Holsteins and Guernseys In the Herd

The herd at Forsgate farms consists of over 400 registered Holstein and Guernsey cattle, of which approximately 200 are milk producers at all times. The Guernsey milk is sold as Forsgate Special Guernsey, while the Holstein milk is blended with that bought from other producers for sale as "Regular Pasteurized" milk. Heifers for future milk producers are all bred and raised on the Forsgate Farms. No stock for milking is bought from any other outside sources. To maintain herd quality, the finest of pedigreed bulls are bought from other breeders, and likewise other breeders purchase Forsgate blood-lines in order to build up or maintain their blood lines.

At the time of this interview with Mr. Whelan at Forsgate Farms he showed a check for $1,000 that he had just received for three young bulls sold to a breeder in Puerto Rico. So well known are the blood-lines of the Guernseys and Holsteins on this farm that rarely is there any difficulty in disposing of surplus cattle to other breeders.

Founded in 1917

The Forsgate Farms was founded in 1917 by John A. Foster of New York in a large degree to satisfy his hobby of breeding Percheron horses. Coincidental with the horse beeding activities, Mr. Foster had in mind the idea of making the farm as nearly self-supporting as possible. Pure bred Holstein cows were the first obtained for the founding of the dairy. Today the dairy enterprises on the farm outrank any of the other farm activities.

The present manager of the Forsgate organization is Matthew R. Whelan, who has been connected with this institution since 1931. Previously he had been associated with other producer-distributor organizations which operate in somewhat the same capacity as Forsgate.

In addition to the dairy and poultry operations on this farm there are also orchards, an 18-hole golf course, and considerable truck farming. A visit to the Forsgate Farms reveals more than just a producer-distributor dairy. It is an institution of many varied activities operated on a businesslike commercial scale.

MILK CONDENSING EQUIPMENT

Vacuum Pans and Hotwells
Single and Double Effect Tubular Evaporators
High Temperature Cream Pasteurizers

•

SPRAY PROCESS MILK DRIERS

•

CAPABLY ENGINEERED — CAREFULLY BUILT

C. E. ROGERS CO.

8731 WITT ST. DETROIT, MICH.

Detect Dirty Milk

With the Hinman Sediment Tester you can quickly detect dirty milk. You know before you dump milk in the weigh-tank whether it should be rejected. One man can make tests so fast that incoming cans are not held up. Write for Free illustrated folder telling all about this quick, simple tester.

HINMAN MILKING MACHINE CO., INC.
DEPT. ST ONEIDA, NEW YORK

Send for Samples of the New
DUBL-CUSHION
EGG CARTON
DOUBLE STRENGTH *for*
DOUBLE PROTECTION
Quick-Easy Hand Folding

REVIEW WANT ADS PAY

MILK PLANT PROBLEMS

DISCUSSED BY H. J. BRUECKNER

Department of Dairy Industry, Cornell University, Ithaca, New York

Composition of Milk and Checking on the Raw Supply

Question:—

"Please send as soon as possible, a bulletin or other information covering in detail the constituents and their percentages in dairy milk, and the approved method or procedure for determing bacteria and bacteria count in milk. We have a compound microscope, but do not know whether it is satisfactory for milk work. What size of microscope is needed for this work? We would appreciate illustrations of different bacteria (harmless and harmful) likely to be found in dairy milk, and believe that milk producers should be thoroughly and well informed relative to bacteria generally found present in milk. In addition to making bacterial counts, how can we be sure of taking in only good milk?—F. J. T., *Springwater, N. Y.*"

Answer:—

Your recent letter to the New York State College of Agriculture at Ithaca has been referred to the writer.

We do not happen to have bulletins pertaining to all of the questions you raised in your recent letter, but the enclosed publication —Bulletin 295, "Determination of Bacteria in Milk or Cream Purchased on Basis of Bacterial Count with Law and Recommended Procedure," published by the New York State Department of Agriculture and Markets—will give you directions for making plate counts as well as microscopic counts. This publication covers the subject very well.

We are writing to the Experiment Station at Geneva, asking them to send you the bulletins they have which give information on the microscopic examination of milk as well as some photographs illustrating good milk and milk with one or more bacterial defects.

So far as your microscope is concerned, I would suggest that you take it to the laboratory in your community or county which does the milk control work. I imagine that they will be able to tell you whether or not the microscope is satisfactory for milk work. Perhaps your County Agricultural Agent can tell you where the milk control laboratory is located, if you do not happen to know.

If you do not get any satisfaction from such a laboratory, please send us some of the details of the construction, such as the name of the instrument, the numbers on the eye pieces (the lenses at the top of the microscope tube), the numbers on the objectives (those lenses at the bottom of the tube), and any other descriptive material on the microscope.

The composition of average milk is usually given as follows:

Water	87.3 per cent
Lactose (milk sugar)	4.9 per cent
Fat	3.6 per cent
Casein	3.0 per cent
Ash	0.7 per cent
Albumin	0.5 per cent

These are the major constituents. There are scores of minor elements and compounds in milk. A few of the more important ones with approximate percentages are the following:

Calcium	0.14 per cent
Phosphorus	0.10 per cent
Chlorine	0.12 per cent

So far as vitamins are concerned, milk is a very good source of vitamin A and, of course, the more yellow or the more carotin the milk contains, the higher the vitamin A value as a general rule, especially during the winter or stabling season. Milk is a good source of vitamin B. When fresh, it is also a fairly good source of vitamin C but on storage and exposure to sunlight and copper or copper-bearing metals, vitamin C disappears rather rapidly. Normal market milk has about a fifth to a tenth the amount of vitamin C that fresh milk contains. Vitamin D is not important in normal milk because of the very small amount it contains. Milk is a very good source of vitamin G.

In addition to the above constituents there are also organic substances in milk known as enzymes. These materials, which are probably chemicals, cause certain deterioration in milk and for that reason the knowledge of these is important if one is going to produce a first-class product.

Another point which you probably already know but which is important from the standpoint of maintaining a good supply of milk is that the milk be smelled or tasted as it comes into the plant. It is, of course, impossible to taste too many samples, but it is well to take samples of the producers' milk and taste them at regular intervals if there are so many dairymen drawing milk to one plant that it is impractical to do this tasting every day. The milk, of course, can be sampled, refrigerated, and held for tasting later in the day. It does not necessarily have to be done at the time the milk is received. The smelling can be done at this time, of course.

I hope that I have given you some of the information you want, and assure you that if there is something which I have not made clear or there are any other questions with which you think we can help you, we shall be glad to have you write us again.

Significance of Coli In Milk

Question:—

"The laboratory which does our control work has been reporting for some time that both our raw milk and pasteurized milk have b' coli in them. They tell us the b' coli should not be there, but do not seem to be able to tell us how to put out a product which does not show the b' coli. Can you tell us what to do to put out a product without these bacteria in it?—A. H. H., *Dayton, Ohio.*"

Answer:—

The letter which we have just received from you is a more or less common inquiry. The problem of producing a bottle of milk negative to the coli test is not a difficult one.

Solving the problem for yourself probably will be easy if you know that the bacteria commonly called *Bacterium* coli are very widespread in nature and thus milk is very readily contaminated with the organisms. The contamination of the milk may be brought about by long exposure to air; by manure or other foreign matter getting into the milk; by using improperly washed and "sterilized" milk handling utensils either on the farm or in the plant; or by the milk being contaminated from cooling water, drip from pipes, and the like.

Under ordinary farm conditions it is practically impossible to produce raw milk without the milk showing positive to the colon test. Even with the extreme care which is practiced in handling certified milk, members of the coli group of bacteria get into the milk occasionally. As far as average raw milk is concerned, the presence of coli is not significant. This is not true, however, when a pasteurized product is being considered. The presence of coli in the finished pasteurized product usually means improper pasteurization or contamination after pasteurization, that is by equipment from the pasteurizing vat to and including the bottle or can.

The presence of coli in the finished product usually can be avoided because according to recent work done here at Cornell University less than one per cent of the organisms belonging to the colon group survive pasteurization. As long as the milk or cream shows a satisfactory phosphatase test, proper "sterilization" of every piece of equipment with which the pasteurized product comes in contact usually

eliminates the difficulty. A thorough job of "sterilization" must be done, however. Do not overlook such things as the outside of a no-foam can filler, rubbers on a bottle filler after they are placed on the valve assemblies, the inside of the air tubes on the common bottle fillers, and other similar parts. The job must be thorough.

If, after following the above suggestions, you still have difficulty, write us again and I am sure we can get the trouble corrected.

Cost of Pasteurizing Milk and Use of Paper Containers

Question:—

"Will you kindly answer the following questions:

"1. How many cows are necessary to make the smallest pasteurizing unit profitable?

"2. In planning a dairy would the use of paper milk containers simplify the equipment, or not?—A. B. F., *Portchester, N. Y.*"

Answer:—

A copy of your letter of October 9th, in which you raised a question on paper containers and the size of dairy for a pasteurizing unit, has been received.

So far as the paper containers are concerned, there are two general types. The one type is preformed at the paper company factory, while the other type is formed in the milk plant. This latter bottle requires expensive equipment, thus making it necessary that the plant bottle quite a few thousand quarts of milk per day. The preformed bottle, or the one which arrives at the milk plant in its final shape, can also be divided into two groups: the one group requires special * * * equipment for filling and capping; the other group of preformed bottles can be used with bottling equipment handling ordinary glass bottles. The conventional types of bottle closures are also used on this latter group of bottles.

The paper containers which I assume will fit your business cost approximately 1⅓ to 1½ cents each. The quart size glass bottles cost about 5 to 7 cents each. The average glass bottle usually is used from 15 to 20 times before it is broken or lost. The cost of the paper container per usage is, of course, more expensive. This is especially true for house to house delivery. It may be that with certain types of delivery, as stores, restaurants, and the like, where glass bottles may not make very many trips, the paper container may not be any more expensive. * * * Before going too far either way into the discussion as to whether or not one type of bottle is cheaper than another, more information must be at hand than that which you gave us. We shall be very glad to do anything we can to help you, if you will give us further information.

The size of business necessary to support a pasteurizing unit seems to vary considerably among milk distributors. Distributors who can purchase a satisfactory supply of pasteurized, bottled milk very often favor purchasing the pasteurized milk over doing their own processing until they have a business involving perhaps 2,000 or more quarts of milk. Other milkmen feel that as long as they have 300 to 400 quarts, they have a large enough amount to make it more economical for them to do their own pasteurizing as compared to having it done in a more or less custom fashion.

We are asking our Department of Agricultural Economics to send you a copy of some mimeographed material, giving you figures on costs of pasteurizing, depending upon the size of business. Perhaps from this you can get some ideas to help you answer your questions. The figures which will probably be of most interest to you along this line will be found on page eleven of the material, entitled "Milk Retailing by Producer-Distributors in New York State." This work was done under the direction of our Professor Leland Spencer, who has quite a bit of experience in studying the cost of marketing milk. The following was taken by Professor Spencer from the above mentioned report:

"All pasteurizing distributors had lower cost per quart than all raw milk distributors. This was due to the larger volume handled by the pasteurizing distributors. For distributors having similar volume, the differences in costs were as follows:

	Raw	Pasteurized
Small businesses: (Less than 200 quarts)		
Number	13	17
Average quarts daily	159	177
Plant cost per quart	1.58c	2.15c
Total cost	4.72c	4.91c
Medium-sized businesses: (300 to 400 quarts)		
Number	14	17
Average quarts daily	306	344
Plant cost per quart	1.29c	1.68c
Total cost	4.00c	4.52c

"Generally when a producer-distributor installs pasteurizing equipment, he builds up a larger business in some way, so that the overhead will be spread over more units."

If, after you receive the publication, you have any further questions, please do not hesitate to write us again. We are always glad to be of service at any time.

INCREASES CAPITAL STOCK

Eau Claire, Wis.—Milk Products, Inc., has increased its capital from $50,000 to $160,000.

AMERICAN DAIRY SCIENCE ASSN.

Secretary Stoltz Announces Election of Officers For Coming Year

Ballots sent by mail to Prof. R. B. Stoltz, Ohio State University, secretary of the American Dairy Science Association, by members of the Association resulted in the election of Prof. Harry Cave, Oklahoma A. & M. College, Stillwater, vice-president; and Prof. C. N. Shepardson, Texas A. & M. College, College Station, and Prof. Fordyce Ely, University of Kentucky, Lexington, directors for three years.

The election also makes Dr. E. S. Guthrie, Cornell University, Ithaca, N. Y., president of the Association, as the vice-president accedes to the presidency the following year. The retiring president, Dr. Earl Weaver, Michigan State College, East Lansing, becomes a member of the board of directors for one year.

Professor Stoltz reports a membership gain from 1,182 to 1,451 during 1939. The Association encourages research work that may benefit any phase of the dairy industry and reports significant discoveries in the *Journal of Dairy Science*, which reaches subscribers in nearly every nation.

SEEK RE-HEARING

New Orleans, La.—A request for a re-hearing on the recently adopted milk-marketing agreement relating to the sale of milk and cream which are used in the manufacture of ice cream was directed to federal authorities by the agricultural committee of the Association of Commerce at a meeting here recently.

CHAIN STORE BUTTER SALES

Chicago, Ill.—Sales of butter by chain stores in the Chicago area in the week ended September 16 averaged 259 pounds per store, a gain of eight pounds per store compared with the previous week and nineteen pounds per store over the average for the comparable week in August.

HUNDREDS of satisfactory INSTALLATIONS

NO COMPLICATED MECHANISM — LOW OPERATING COSTS

THE 'STURDY-BILT" Jr.
Less Than $800

BEAUTIFUL CLEAN SPARKLING BOTTLES

"STURDY-BILT"

SOAKER-TYPE BOTTLE WASHERS

SIZES 16 to 50 B. P. M.

PLEASE HEAR OUR STORY

STURDY-BILT Equipment Corporation, West Allis, Wisc.

What Do You Do—

WHEN SOME GOVERNMENT AGENT
OR GOVERNMENT RULING
INJURIOUSLY AFFECTS YOUR BUSINESS?

This should not happen. Why not do as others are doing—
Ask me to look after it for you?

A. M. LOOMIS, Dairy Industry Consultant in the National Capital
945 Penn. Ave., Washington, D. C.

Modern Methods of Fly Control

W. A. Pohlman Considers All Phases of the Problem of Preventing Insect Infestation In and Around the Milk Plant*

THE title of this paper is, possibly, somewhat of a mis-nomer, because as we will discuss further along, there is a great deal that must be done in the matter of controlling flies that is not, in any sense of the word, modern, but is strictly an application of common-sense practices which unfortunately are not practiced. If they are practiced, they are carried out in a very desultory or hit-or-miss fashion. One reason for this, possibly, is that too many people are too willing to accept the fly as a necessary evil, and are not fully aware of just how expensive an insect it is, not only in the matter of spoilage of the product but also as a health menace.

Therefore, I believe this subject should be divided into two sections as follows:

Section I—*Prophalactic Methods*

(A) In the territory adjacent to and surrounding the plant property

(B) In the plant proper

Section II—*Plant Openings*

(A) Proper closure of all openings in the processing department

(B) Erection of devices as barriers at points through which normal traffic flows

(C) Elimination of superfluous or unnecessary openings.

Prophylactic Treatment

This, in my opinion, is possibly the most important factor involved in the matter of fly control, and is undoubtedly the one given the least attention. I believe this is due in great measure to lack of knowledge rather than neglect, and I think we can accept ignorance as the major cause for the reason that in all my contacts—which have included some of the best minds in the dairy industry, and institutions that are spending as high as $5,000 per year in the control of this particular insect—I have found an earnest and sincere desire by these people to eliminate this problem. Frankly, in a great many of these plants the matter of cost is of no object so long as they can effect a reasonable measure of control.

I find in this work that there is a woeful lack of knowledge of the habits of the fly on the part of the men responsible for this control. It might be fitting at this time to suggest that it would be money well spent by the department to issue a pamphlet along this line and distribute it to each licensed dairy producer or processor operating in the state. If this is done, it will most assuredly make your job much easier. * * *

*An address by Mr. Pohlman, of the National Electric Screen Corp., Chicago, Ill., delivered at the Annual Convention of the New York State Association of Dairy and Milk Inspectors at Syracuse on September 29, 1939.

Outside the Plant

You men being familiar with the life cycle of the fly, I will not take time now to go into this phase, but there are a few facts relative to it that are pertinent to the problem under discussion at this time. First, the normal range of the fly can be circumscribed by a circle with a radius of approximately 1,000 yards. Therefore, accepting this as a working fact, it follows that the fly situation in the majority of plants is of their own creation. We will grant that there will be some of the fly population that can be charged to the wind blows, and some that can be charged to transportation by farmers on delivery, etc. These two sources of infestation, however, are so small that they cannot be considered much of a factor. The actual facts are that 90 per cent of the flies that any given plant has to contend with are raised on their own property or on the property immediately adjacent.

With the above facts established, it necessarily follows that common sense would dictate that we try to eliminate the propagating areas of these insects. For successful propagation, flies must have (1) moisture; (2) food—and in the matter of food, please keep in mind that soil rich in humus will provide sufficient food for the larvae to develop on; and (3) areas not exposed to direct sunlight nor to constant disturbance. Places meeting the above descriptions will be found around the outside of practically any dairy plant, and all areas of this nature should be accepted as suspected plots and thoroughly impregnated with ordinary 20-Mule Team Borax.

Inside the Plant

Now for the inside of the plant. In a great many instances, hundreds of flies are hatched out every day *inside* a plant. I know there will be a lot of plant managers who take exception to this statement, and we will grant that there are undoubtedly many plants in which this condition does not occur. Of necessity, however, this paper must deal with the average, and this includes a large number of older plants that have crevices either in the woodwork or in the masonry in which, over a period of time, has accumulated matter that offers food for fly larvae. It has been our suggestion in surveys we have made in such plants that all parts of the plant not actually used in the processing of the product be liberally coated with whitewash on all areas, not even excepting the coal bin. In applying this, care must be exercised that complete coverage of the entire area is made. In the processing room, all cracks and crevices should be sealed with concrete, and in the case of wooden walls, all old wood should be removed and new, tight-fitting wood installed. stalled.

Our investigations of cheese plants disclosed at least one place that invariably turned up as a most prolific propagating ground—namely, the drain and salt tables. A scum will farm under these tables, and in the majority of cases we investigated this scum was alive with larvae and pupae cases. It has always been our recommendation that these tables be scrubbed at least twice a month with a borax solution. In making this solution, it is necessary that borax be added to the water up to the point where the water will not absorb any more. Then scrub the underside of the tables with this solution.

We recommend the use of borax because it is but mildly caustic, or toxic, and only so in excessively large quantities. It is definitely safe as far as the possibility of injury to human beings is concerned, so that if any employee should, through error, include borax instead of salt or some other element of similar appearance in the product, no serious injury would result to the consumer of the product. We have found that it is especially effective in killing flies in the larvae stage, and areas that have been thoroughly impregnated or scrubbed with borax have definitely been closed as breeding grounds for flies. After the soil around the plant has once been saturated with borax, it takes very little further attention to maintain a degree of saturation sufficient to keep the area closed to propagation.

We appreciate that it is not practical, nor would it be even possible, to ferret out every fly-breeding spot, and of necessity our prophylactice treatment would be accorrded only to those areas that indicate themselves on the surface as fertile areas. Therefore, our next step in the control of these insects must be taken in the plant itself.

Plant Openings

All new plant construction is, of course, taking the fly problem into consideration by eliminating unnecessary openings and further protecting the processing rooms by having buffer rooms between them and outside areas. This, of course, is just good common sense, and goes a long way toward alleviating the situation. It is not, however, the answer to complete control, as once an insect gets into the plant—irrespective of the buffer rooms between its original point of entrance and the processing rooms,—it will eventually find its way into the latter. Our fight, therefore, must start at those points where the fly has an opportunity to enter the plant; these points are first, the intake and can return chutes; second, the doors through which normal traffic flows; and third, the receiving dock for the returns.

The can return chute, as a rule, does not offer a very great problem in the majority of

Try Our

Monday Night Statistical Review

A Careful Analytical Study of the position of . . . Butter, Eggs and Dressed Poultry

BY · MAIL · OR · BY · WIRE

///

Write for Sample Copy

Urner-Barry Company

Publishers

173 Chambers Street New York City

plants because of the proximity of the washer to this opening. The heat generated by the washer is a very definite detriment to the possibility of the fly's using that opening as an entrance. However, the chute through which the milk is received is one of the greatest sources of plant infestation.

The Milk Receiving Chute

As a result of six years of experience in the field, testing practically every device we could think of or discover to close this point to flies, we have centered our recommendations on a spray nozzle mounted immediately above the opening. The spray head we are using throws a fine mist comparable to that seen over a green vegetable display stand. There is not enough moisture discharged through this spray head to create a drainage problem outside the plant, nor to affect materially the outside of the containers except in instances where the line may be blocked for a period of time and a can remains directly under the spray. Even then, it would take considerable time for enough moisture to gather on the can to create the possibility of drippings from the can getting into the weigh tank.

This method provides a definite curtain through which no fly will pass. The same method is also applied to the intake chute on the return dock. This point is almost as important as the intake chute in the receiving room, with this added hazard; a great many of the bottles that are returned will, on investigation, be found to contain large numbers of live flies which gradually work out of the bottles after they come to rest in storage while awaiting washing. In cases of this nature, we have found it advisable to install auxiliary trapping equipment, which will be discussed further on.

In a great many of the plants in which we have worked, we have recommended that the return department be isolated from the rest of the plant, and that the bottles, after being washed, be transported back into the plant on a moving belt through a tunnel made of sheet metal. We have found this to be quite a deterrent to flies following the hot bottles into the plant.

Barriers at Doors

All openings used for entrance to or exit from the plant, whether for normal foot traffic or for trucks carrying the product, are so constructed under present arrangements that they provide nothing more than a roosting place on which the fly rests until someone accommodates it by opening the door and brushing it into the plant. Our problem here, therefore, would be to provide means to eliminate this area as a concentration point for the insects.

A great many devices, such as fans, paper ribbons, ropes, etc., have been tried out with very little success, but within the last four or five years there has been developed a device—an electrified screen—that can be inserted into the upper half of the door in that area now covered by ordinary screen mesh. This device operates off the regular light circuit through an auxiliary unit—a transformer—and will kill every insect approaching that area. These screens have been recommended in surveys on this problem taken at various plants, and we are fortunate in that we can report that every installation has been eminently successful.

In applying these units, we have required that the plant operator make the lower half of the door solid so that all air currents are diverted through the top half of the door which, of course, carries the electric screen. The spacing between the electrocuting bars on the electric screen is 9/32 of an inch. This naturally offers very little resistance to air, with the result that there is a definite draft carried through the doors that are so equipped. As flies are influenced by air currents, any fly that may have gotten into the plant through other sources is eventually drawn to the electric screen. Also, since the flies are drawn to the plant because of the odors originating there, they would naturally be attracted to the area where there was the greatest concentration of these odors, and this area, of course, would be at the doors. Because of the wide spacing of the bars, the unit offers no apparent barrier to the fly, and it attempts to enter this apparent opening to follow the odor to its source. The result is his demise.

Other Recommended Installations

At times we have found it practical to also recommend the use of electric screens in odd windows, and when they are used in this manner they act more as traps than as barriers to flies entering the plant. Situations where traps are needed usually develop around the cheese or casein plant where they have a whey storage tank outside the building but immediately adjacent to it. This area is, of course, particularly attractive to flies, and a unit installed in a window near the tank will destroy a great many of these insects. Naturally, those that are killed at this point do not have to be contended with at the entrances.

We also find it advisable to recommend, in some instances, the use of another auxiliary unit such as a portable box trap, constructed of steel with an electric screen over the top of it, on loading docks or areas outside the plant where flies show a tendency to gather. Here the auxiliary equipment is used for the same purpose as the screens in the window installations.

Now for a word of explanation about electric screens. This equipment undoubtedly is not new to the majority of you men. However, there are certain features that a screen must have to be used successfully in a dairy plant. Milk has a tendency to absorb foreign odors more easily, perhaps, than any other food product we have to deal with, and as a dehydrating fly has a distinctly unpleasant odor, a unit used for the destruction of this insect must be constructed so that it reduces to the barest minimum the possibility of an insect lodging and dehydrating on it.

This problem has been overcome by one screen manufacturer, whose device is so constructed in the matter of insulation as well as wire spacing that the problem of the dehydrating fly is practically nil. The ability of this equipment to operate under adverse moisture conditions also is such that we ask the plants using the equipment to hose it down at the end of the day just as they do their other machinery.

Limitations Outlined

Now, I do not want to create the impression that these devices, when used indiscriminately, are the answer to the fly problem. Electric screens and electrocuting traps have their limitations just the same as any other equipment, and unless they are properly applied they are liable to give very unsatisfactory results. In my work I have had occasion to meet operators who have used units of this type and are not satisfied with the results. Invariably the cause of this dissatisfaction was not in the equipment itself but rather in its application. My advice to anyone contemplating the use of this method of controlling flies is that he be certain that he is dealing with an individual who is trained in the application of the proper equipment to the problem at hand, and guard against being taken in by an ordinary screen salesman who has no interest in the matter of controlling the problem beyond the immediate mercenary angle.

It is always a pleasure for me to have an opportunity to discuss this problem with men in your capacity. In my various contacts, however, I sometimes have wondered: Are we not spending more policing effort on the processing end than on the producing end? I have in mind particularly the small producers who are inadequately financed and unable to provide themselves with the equipment necessary properly to handle their product. In many cases, either through negligence or ignorance, they do not observe even the fundamentals of sanitation.

I am led to this observation by the contacts which, of necessity, I make in this type of work. I have been retained by some of the largest operators in the dairy field to help solve problems arising in fly control, and have found that in many cases the off-flavor and gasiness occurring in the curing product originated quite often at the initial source of the product.

Importance of Primary Sanitation

You can appreciate that improperly handled milk might reach the processor in a state of deterioration that makes it difficult for the ordinary personnel of the plant to detect it, and can only be discovered through prolonged laboratory tests. This particular lot, when mixed with sterile milk, will have a tendency, because of further deterioration, to cause an off-flavor in the finished product coming out of the combined lots.

In checking back to locate the sources of milk of this nature, we have turned up situations that caused us to wonder if any inspection existed in that particular locality, as the conditions under which this milk was produced and handled made it impossible to keep the milk sterile.

Now, I appreciate that to police the entire source of this product would undoubtedly increase the personnel of this department materially, and as an engineer interested only in the answer to a certain problem, I have no comments to make on how this could be done. I also appreciate that were the same rules applied to the small producers that are set for the large operators, particularly in the matter of sanitation, the farmer would be forced out of the producing field. This view, on the surface, may appear very callous, but if a man is not financially able to handle a food product in such a way that it is kept fit for human consumption up to the point of delivery to the consumer, he has no business handling that product at all. However, I believe that a great deal can be accomplished in the matter of sanitation by a consistent and thorough educational program.

Keep Posted ON VALUES

•

You will Buy or Sell

BUTTER · CHEESE

and other Milk Products

to greater profit, if you *Know the Market*

•

The Producers' Price-Current

Subscription Edition

SUBSCRIPTION RATES: Daily $1.25 per Month—$12.00 per Year
One Copy per Week (any day) $2.50 per Year

Published by

URNER-BARRY COMPANY, 173 Chambers Street, New York

Dairy Inspectors Meet

Record Attendance at Seventeenth Annual Sessions Recently Held at Syracuse—Many Interesting Addresses

(By B. I. Masurovsky, B. S., M. S.)

The Seventeenth Annual Conference of New York State Association of Dairy and Milk Inspectors took place in Syracuse on September 27th and was held for three days at Hotel Syracuse. More than 500 members and guests formed a record attendance when the meetings were held in the spacious grand ballroom of the Hotel Syracuse.

The program was as follows: On September 27th Dr. F. W. Graves of New York State Department of Health presented a paper on "A survey of Mastitis Control Under Several Plans" based upon a survey of 200 herds and approximately 5,000 cows. Satisfactory progress is being made in control of the spread of mastitis by detecting the infection at an early stage and by proper segregation of the affected animals. This paper was part of a symposium on the subject of mastitis. The other two papers were, "The Relation of the Elimination Program to the Control of Mastitis" by G. J. Hucker of N. Y. State Agricultural Experiment Station, and "A Discussion of the International Classification of the Streptococci of Bovine Mastitis" by Ralph B. Little, The Rockefeller Institute for Medical Research, Princeton, N. J.

The afternoon session dealt with the following topics: "Progress Report on Grade A Milk Control Laboratories (Bacteriological)" by Dr. C. E. Safford, N. Y. State Department of Agriculture and Markets, Albany, N. Y.; and "New Tests for Available Chlorine" by Dr. Harry Scharer, Department of Health, New York City. This report indicated possibilities of a more sensitive as well as practical test to check the strength of chlorine solutions used for chemical sterilization of dairy equipment.

The Phosphatase Test Discussed

The next paper was on "Precision in Reading Results of the Phosphatase Test" by F. W. Gilcreast and W. S. Davis, N. Y. State Department of Health, Albany, N. Y. This paper dealt with the use of "Luximeter" as a means of differentiating the intensity of color produced in milk when the phosphatase test is employed. The "Luximeter' is a photoelectric colorimeter perfected by General Electric Laboratories.

This was followed by a report on "The Application of Wetter Water to Dairy and Milk Plant Use." This was presented by Dr. F. M. Scales of Sheffield Farms Co., Inc., New York City. Dr. Scales emphasized the importance of wetting properties of cleansing solutions to facilitate the cleaning action on dairy equipment. The efficiency of a detergent will depend to a great extent on its wetting function when in solution. This wetting property is more of a physical or mechanical action exhibited by the detergent rather than a chemical action. The essential points of a good cleanser, he stresseu, are emulsification, saponification, penetration and rinsing qualities.

The concluding paper for the first day of this conference was a report on "Deaeration of Market Milk" by P. F. Sharp, D. B. Hand and E. S. Guthrie, Cornell University, Ithaca, N. Y. The presentation of this paper was accompanied by a demonstration of samples of milk obtained on an experimental scale whereby some milk was deaerated to compare with untreated milk. Milk deaerated was devoid of the characteristic oxidized flavor which was present in the milk not so processed. Dr. Sharp emphasized the fact that to accomplish deaeration of milk successfully the sanitary pipe line must be airtight, otherwise recontamination with air at different points of the pasteurization, storing and bottling processes will undo all precaution taken at any separate point of operation in handling the milk.

Considers Ice Cream Problems

On Thursdayy, September 28th, other topics were discussed, among which was a special request paper presented by Dr. F. W. Fabian, Michigan State College, on "New Developments in the Sanitary Control of Ice Cream" pointing out the necessity of paying attention to the non-dairy ingredients which are added at the freezer to the already pasteurized ice cream mix. The new developments in sanitation consist in supervising the preparation of fruits, nuts, flavoring and coloring materials from their bacterial standpoint. Also training the personnel of an ice cream plant to be sanitary conscious and cultivate clean habits in hygiene.

The other papers were: "Practical Value of Deck Inspection as Compared with Farm Inspection" by Sol Pincus and Samuel Abraham, Department of Health, New York City. Also "Goats Milk and Its Supervision" by J. C. Marquardt, N. Y. State Agricultural Experiment Station. This paper was followed by a report on "The Production of Milk in the New York Milkshed as Affected by State and Federal Marketing Control' by H. H. Rathbun, Dairymen's League Co-op. Assn., New York City, and a discussion on "Has the Approved Inspector System Promoted Uniformity?" by R. E. Irwin, Director, Bureau of Milk Sanitation, State Department of Health, Harrisburg, Pa.

The new conception of feeding milk and digestibility of same was ably presented by Dr. Leslie A. Chambers, School of Medicine, University of Pennsylvania, Philadelphia, Pa., the title of the paper being "The Digestibility of Processed Milks."

Special Feature Talk

A special feature talk on "Some Bacteriological problems Involved in High Temperature, Short-Time Pasteurization" by E. H. Parfitt, Purdue University Agricultural Experiment Station, Lafayette, Ind., was accompanied by slides showing results obtained in recent experiments conducted in the Chicago area. This paper was opened for discussion by Dr. T. W. Workman, Yale University, New Haven, Conn.

A great deal of interest was created by the lively arguments pro and con high temperature short-time pasteurization. One sure point was clear that the source of the raw milk has a great bearing upon the number of thermoduric organisms present in the finished pasteurized milk. This condition is traceable to unclean utensils on the dairy farm and at the receiving stations or the methods employed in sterilizing cans or other milk containers. It is essential to eliminate open seams, for they are lodging places for nearly pure cultures of the thermophylic organisms.

Further experimentations are under way, and the progress made so far is gratifying for it points to distinct advantages of applying high heat short-time pasteurization of milk.

In addition to the splendid program of papers and discussions which followed them, the social arrangements in the form of the annual banquet and sight-seeing made it a very beneficial and outstanding event of the year.

MADISON NEXT ON LIST

Wisconsin Capital Chosen For Conduct of Satmp Plan of Food Distribution

Washington, D. C.—Selection of Madison, Wis., as the next experimental city in which the Food Order Stamp Plan will be put in operation was announced last week by Secretary of Agriculture Henry A. Wallace.

Decision to include Madison among the areas in which the Stamp Plan will be in effect followed recent conferences there between Paul H. Jordan, Acting Regional Director for Stamp Plan operations in the Middle West, and state and local officials and representatives of the wholesale and retail food trades.

With a population of 65,000, Madison has a total of approximately 4,000 relief cases representing about 8,500 individuals.

To Use Two Variations

Two variations of stamp distribution will be used in Madison. One group, at present receiving direct relief, part of which is in the form of food orders, will be eligible to receive the free blue surplus food order stamps without being required to buy the orange colored food stamps which are provided in some other forms of the Stamp Plan. The value of the blue surplus stamps which will be given families in this group will be determined on a basis of approximately fifty cents per week for each member of the eligible family.

Under the other method of stamp distribution in Madison, eligible families who are receiving cash relief will be given the opportunity to buy orange colored food stamps with cash and to receive free blue surplus stamps in a ratio of one dollar's worth of blue stamps for each two dollar's worth of orange stamps bought. The orange stamps provide for a continuance of normal food purchases by the family, and the free blue stamps are used to secure specially designated surplus food commodities as additions to the family's food supplies.

Participation in the Stamp Plan in Madison, as in all other areas, will be entirely voluntary.

Actual operation of the plan in Madison is expected to start within about a month.

MANY PLANTS SIGN UP

St. Paul, Minn.—A total of 734 dairy plants operating in Minnesota have now signed up to contribute to the proposed national advertising campaign for dairy products. Dan T. Carlson is president of Minnesota's Dairy Industry Committee.

SELECTED BOOKS

For Progressive Dairy Products Plant Operators

Selected by Professor H. J. Brueckner, Cornell University

PRICE LIST

No.	Title	Author	Price
400	Market Milk	Kelly & Clement	$4.50
401	Milk and Milk Products (2nd Ed.)	Eckles, Combs & Macy	3.50
402	Modern Methods of Testing Milk and Milk Products	Lucius L. Van Slyke	2.00
405	Cheesemaking	J. L. Sammis	2.75
406	The Book of Cheese	Thom & Fisk	2.60
407	Condensed Milk and Milk Powder (5th Ed.)	Otto F. Hunziker	6.50
408	Condensed Milk	Atushi Miyawaki	4.50
409	Ice Cream	Turnbow & Raffetto	4.00
410	Fundamentals of Dairy Science (2nd Ed.)	Associates of L. A. Rogers	6.00
411	Judging Dairy Products	Nelson & Trout	2.00
412	Dairy Engineering	J. T. Bowen	3.75
413	Management of Dairy Plants	M. Mortensen	3.00
414	Dairy Bacteriology	B. W. Hammer	5.00
415	The Technical Control of Dairy Products	Mojonnier & Troy	5.00
417	Market Milk and Related Products	H. H. Sommer	6.00
418	Theory and Practice of Ice Cream Making	H. H. Sommer	5.75
420	Pasteurization of Milk From the Practical Viewpoint	C. H. Kilbourne	1.25
430	The Care and Handling of Milk (New Ed. Nov. 1st)	H. E. Ross	4.00
431	Milk, the Indispensable Food	J. A. Tobey	2.25
432	Casein and Its Industrial Application	Sutermeister & Browne	6.50
437	The Butter Industry	Otto F. Hunziker	
	(New Edition Will Be Ready April 1, 1940)		
438	Cheese	Van Slyke & Price	3.50

And These Others by Well-Known Authorities

423	The Chemistry of Milk	W. L. Davies	8.00
439	Testing and Manufacture of Dairy Products	Tuckey & Tracy	1.50
403	Questions and Answers On Milk and Milk Testing	Publow & Troy	1.25
404	Questions and Answers On Butter Making	Chas. A. Publow	1.25
440	Elements of Dairying	Olson	3.50
441	Dairy Cattle and Milk Production	Eckles, Anthony & Palmer	3.60
442	Butter (4th Ed.)	Totman, McKay, & Larsen	3.50
416	Principles of Dairying	Judkins & Smith	3.00

FILL IN YOUR SELECTION, BY NUMBERS LISTED ABOVE, ON COUPON AND MAIL TODAY — CHECK MUST ACCOMPANY ORDERS

Order Your Selection TODAY!

D.I.E.

AMERICAN MILK REVIEW
173-175 Chambers Street
New York, N. Y.

Gentlemen:

Please enter my order for the book(s) listed below. I am enclosing herewith

$..... in payment for number(s) .....

.....

.....

Name.....

Address.....

.....

We Pay the Postage to any Point in the U. S. A.

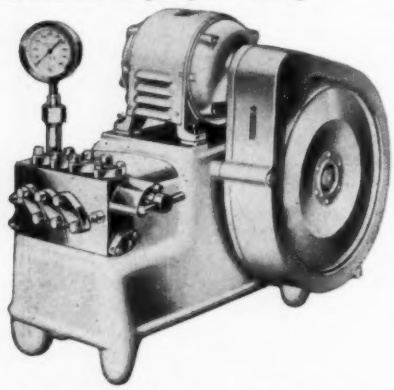
Using Our Separator

Items of Interest

Skimmed From Here and There

Viscolizer, Jr.

MILK PLANT OPERATORS wanting to enter the homogenized milk field requiring less than 75-gallons per hour capacity can now obtain that size machine. The new Junior Sanitary Viscolizer is built in both 50-gallon and 75-gallon sizes. Both machines incorporate all of the sanitary features of the larger Viscolizers and are moderately priced. The manufacturer claims that this homogenizer has twenty-seven less parts, which affords greater sanitation and simplicity in cleaning.



The new Junior Viscolizer is built to operate at pressures as high as 5,000 pounds per square inch if necessary, thus assuring complete and uniform homogenization.

Another feature of this new Viscolizer is its Automatic Viscosity Control which is obtained with only one valve but which provides true two-stage homogenization not only of milk and ice cream mix, but other dairy products as well.

A specially designed sanitary pressure gauge is standard equipment.

The new Junior Sanitary Viscolizer is described in detail in Bulletin G-360, a copy of which will be sent to any of our readers upon request. Address Cherry-Burrell Corporation, 427 W. Randolph St., Chicago, Ill.

Construction

A NEW STAINLESS steel construction material, known as Ludlite Bord, has been announced by the Ludlite division of the Allegheny Ludlum Steel Corporation in Pittsburgh. From the description furnished it will find use as panels for interior or exterior walls. The product consists of thin sheets of the well-known Allegheny Metal (18-8 stainless steel), permanently bonded to an inert mineral backing material to form strong, rigid panels of convenient building size.

The mineral backing material consists of asbestos fibres, Bentonite (volcanic clay), Portland cement and calcined magnesite. This material is processed under great pressure and bonded to the thin stainless steel facing by means of a special pressure-cementing process to form semi-rigid and extremely flat panels. The resultant product is fireproof and weather-resistant. The shining steel facing reflects about 90 per cent of the heat rays directed at it. The backing material has high thermal insulating value and is suitable for indoor or outside applications. It is further claimed that Ludlite Bord is acoustically a dead material with capacity for absorbing sound and is entirely free from warping and surface distortion. The suface has excellent resistance to denting or marring by impact.

A principal advantage in favor of Ludlite Bord is its remarkable ease of fabrication. It may be sawed to shape with an ordinary hand saw. It may be sheared as easily as plain sheet metal and drilled as readily as ordinary hard wood. For some purposes it may be stamped. It can be nailed or screwed in place. Joints can easily be soldered. Installation cost and first costs are said to be low. Only ordinary tools such as found in any carpenter's chest are required. Sawing their product does not cause excessive wear of saw teeth as elements in the backing material provide lubrication.

A complete variety of stainless steel moldings, both snap-on and plain type, have been developed by Allegheny Ludlum for use with the product on flat surfaces, corners or edges. The stainless steel panels may either be nailed direct to the studs, or a special molding nailed to the studs and the stainless panels slipped into place, completely covering the nails. In other cases the standard sections can be cut and fitted to the requirements of the job as with ordinary lumber.

G-E Transfer

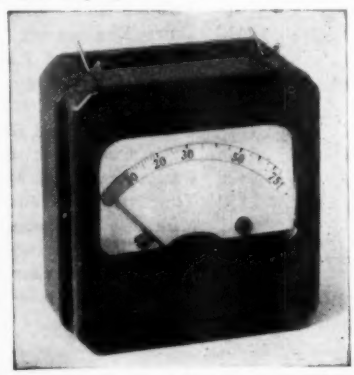
AS PART OF A PROGRAM to consolidate the various activities of the General Electric Co. in respect to appliances, it has been announced by H. L. Andrews, vice-president, that the company's specialty appliance division has been transferred from Cleveland, Ohio, to Bridgeport, Conn.

In connection with the transfer to Bridgeport, a new appliance and merchandise institute is being constructed near the main entrance of the company's plant. It is expected that the structure will be ready for occupancy by December 1. The home service center of the institute will be under the direction of Miss Edwina Nolan, who served in the same capacity in the Institute at Nela Park, in Cleveland. The facilities of the new structure will include an auditorium, several demonstration kitchens, and an extensive product display. It will serve as an educational center for home service activities, and will afford ample opportunity for adequate display and arrangement of the various General Electric home appliances, continuing the work formerly carried on at Nela Park.

Ultraviolet Measurement

A NEW SENSITIVE indicating instrument for measuring bactericidal ultraviolet radiations of the Sterilamp has been announced by the special products department of the Westinghouse Lamp Division, Westinghouse Electric & Manufacturing Co., Bloomfield, N. J.

The instrument consists of a foot-candle meter, a fluorescent screen and a filter that is opaque to visible light but transmits ultraviolet. Radiation is transmitted through the filter and impinges on the fluorescent screen,



which glows at an intensity proportional to the energy received. The foot-candle meter, being sensitive only to visible light, reacts to the fluorescent effect of the screen and indicates directly the amount of ultraviolent energy thus transformed.

A "cradle" or guide automatically centers the light-sensitive cell under the lamp and regulates its distance from the lamp so that readings are always made under the same conditions.

The meter facilitates measurement of the Sterilamp's effectiveness during use in places where the lamp is being used.

Driver's Guide

A TRUCK DRIVER'S GUIDE which enables him to keep operating costs down and to drive with maximum safety, is offered without charge by Dodge Truck Division of Chrysler Corporation according to T. W. Moss, Director of Truck Sales.

Written in simple yet forceful language, the guide covers a variety of key subjects, care and treatment of the truck engine; how to make tires last longer; importance of proper treatment of clutch, brakes and transmission; safety and courtesy on the highway and numerous other topics important to truck driving.

The booklets were prepared originally for distribution at exhibitions. The great demand for "Guide for Truck Drivers" necessitated a second printing for fleet owners and operators. The booklet will be mailed free of charge upon request of the company.

Splendid Trip West

(*Continued from Page* 68)

Early the following morning (Thursday), after breakfast at the hotel, we were again taken by sight-seeing cars to the famous "Garden of the Gods," one of nature's most beautiful gardens of vari-colored natural rock formations.

Over the Continental Divide

Leaving Colorado Springs at about 10:30 o'clock we traveled during the balance of the day through the most beautiful scenery of the colorful Colorado Rockies, entered the Royal Gorge of the Arkansas River via the Denver & Rio Grande Western R.R. and made the usual ten minute stop at the famous "Hanging Bridge" span of the Rio Grande Route. Almost immediately over head stretches the new highway bridge across the Royal Gorge, some 1,053 feet above the river. This is said to be the highest Suspension Bridge in the world.

The scene was most awe-inspiring with a chasm only thirty feet wide. One of our party amused himself as well as the rest of us by tossing slices of bread into the waters rushing by and watching the hungry mountain Rainbow trout bite and fight for the bread.

In the afternoon we continued our pull up the eastern slope of the Continental Divide, reaching the top and crossing at Tennessee Pass, 10,240 feet above sea level, at dusk.

Friday—the last day—and for many the high spot of the trip we arrived promptly on time at Salt Lake City. Sleek, beautiful sight-seeing buses met us and took us to the Hotel Utah for a banquet-breakfast too rich for some. Chicken-en-casserole was the main course. After breakfast we were taken in the same modern and easy-riding buses for a 2½-hour tour of historic Salt Lake City. We took time to go through the State Capitol—probably the most beautifully designed and furnished of any in the country.

As a bit of by-play, our drolly humorous guide declaimed in these words, "This building ladies and gentlemen, is the third finest State Building in the United States" and waited for the bait to be taken. R. C. Hibben of the International Ice Cream Manufacturers Association rose to the occasion, swallowed the bait and said, "What are the other two?" "Oh! Washington is first, of course; then your own State; and this is third," replied the guide.

As we were escorted past show-cases of agricultural products of the state and were struck by the immensity of the beets, the guide said, "Yes, as many as three cops here to cover one beat."

Across the Mountains

At noon we enjoyed a musical treat—a pipe organ recital in the famous Mormon Temple. After lunch, on to Ogden and from thence "out to sea by rail" via the Southern Pacific lines over the spectacular Lucin Causeway across Great Salt Lake. Here we slowed down to some 20 miles an hour and it seemed as if fully half the party crowded the observation platform to take movies. Continuing westward we crossed the Sierra Nevadas and into less rocky country.

Saturday morning found us en route through the fertile Sacramento Valley with its many colorful vineyards, orchards and ranches. Arriving at the Oakland Pier we were greeted by some 25 San Franciscan dairymen in their ten gallon hats and ferried across the bay to our journey's end—San Francisco.

As we sailed under the San Francisco—Oakland Bridge, longest in the world, we were impressed by the beauty of the scene—Treasure Island with the Golden Gate International Exposition buildings plainly discernible, Alcatraz Island ("The Rock"), not far distant, and the famous Golden Gate Bridge just too far away to be seen through the slight haze.

Arrival and Welcome

From the boat deck we watched a formation of 25 army bombers—burnished metal gleaming in the sunlight. The western welcomers scattered through the party on deck and answered all questions.

On docking at the San Francisco Pier we were met by a loud-speaking or singing Calliope

Robert C. Hibben (left), Executive Secretary of International Association of Ice Cream Manufacturers, chats with John Marshall, Secretary-Treasurer of San Francisco Milk Dealers Association

truck and a six horse stage-coach driven by C. N. Mortensen, president of the milk dealers' association and of the Standard Milk Machinery Co.—all quite gala. So to taxis and the various hotels—temporary leave-taking of new friends made en route—and high expectations of a successful show and conventions in the week ahead.

Some of those who traveled on the Dairy Industries Special were:

Mr. and Mrs. L. A. Babcock, Mr. and Mrs. J. C. Bergdoll, Mr. and Mrs. Frank Birdsall, Mr. and Mrs. Edward Breuninger, Mr. and Mrs. C. W. Brock, F. A. Carroll, C. B. Carson, Mr. and Mrs. W. Copeland, Mr. and Mrs. L. A. Corning, J. Cullinane, H. O. Day, Mr. and Mrs. H. J. Dirkes, Mr. and Mrs. J. J. Ernst, Wesley G. Goddard, George B. Hall, Mr. and Mrs. Henry Hall, Mr. and Mrs. E. A. Harding, Mr. and Mrs. E. N. Hershey, Mr. and Mrs. R. C. Hibben, Mr. and Mrs. R. C. Hutchinson, H. J. Jones, Mr. and Mrs. H. F. Judkins, Mr. and Mrs. E. R. Kelley, C. Koerver, J. C. LaGrua, Mr. and Mrs. Frank V. Langfitt, Mr. and Mrs. John Laughlin, Mr. and Mrs. W. H. List, Jr., Mr. and Mrs. L. W. Long, Art Lutz, Frank McCue, John D. McEwen, Mr. and Mrs. H. E. McGraw, Mr. and Mrs. Thomas McHugh, A. F. Maczko, H. Warren Mease and party, Mr. and Mrs. Fred H. Meyers, Harold Miller, Mr. and Mrs. A. Mitchell, Mr. and Mrs. H. H. Mulholland, Mr. and Mrs. J. J. Neidermeier, Mr. and Mrs. Charles L. Noyes, Ray E. Olson, J. T. Quense, Mr. and Mrs. Claude Parcell and daughter, C. L. Patterson, Miss Iva Phelps, Mr. and Mrs. J. H. Randolph, Mr. and Mrs. James Reilly, Mr. and Mrs. Frank F. Rennie, A. Ricciardi, William Richman, Joseph Richstone, Mr. and Mrs. F. W. Robinson, Mr. and Mrs. George A. Sancken, Mr. and Mrs. George Sanderson, Lincoln Scafe, V. Schwartzkoff, Mr. and Mrs. Thomas Scott, E. Sheasley, Mr. and Mrs. Herman A. Smith, Mr. and Mrs. W. S. Sutton, John C. Taber, Mr. and Mrs. H. T. Umpleby, Miss Lena Upson, Mr. and Mrs. L. W. VonLosberg, Mr. and Mrs. Joseph Wilkes, Miss Olive Wilson and Mr. and Mrs. Paul Wyatt.

A FEW USERS
Swift & Co.—Armour & Co.
Wilson & Co.—Cudahy Pkg. Co.
Beatrice Cry—Fairmont Cry
Kroger Grocery
American Stores

Eggs show up large, inviting when packed in SELF-LOCKING Cushion Cartons. Cushioned protection eliminates breakage. Ventilation safeguards flavor. Colorfully printed with your brand name. Send for free samples.

SELF-LOCKING CARTON CO.
300 N. Illinois St., Chicago, Ill.

MORE PROFIT
LESS WORK
Use Wyandotte
The J. B. Ford Sales Company
NEW YORK
1270 Sixth Ave.
COlumbus 5-5015
PHILADELPHIA
401 N. Broad St.
Walnut 2124-Race 08878

Distributors of Dried Milk
General Commodity Corporation
CHAMBER OF COMMERCE
BUFFALO, N. Y.

L. DAITCH & CO. Inc.
Direct Retail Outlet For Quality
EGGS - BUTTER
CHEESE-MILK-MILK PRODUCTS
516 WESTCHESTER AVE., N. Y. CITY
Ref.: Chase Nat. Bank (149th St. Branch)

Breakstone Bros. Inc.
"Division National Dairy Products Corp."
Manufacturers of
Cheese & Milk Products
195 Franklin Street, New York

Experienced Management | Transit Privileges | Rates in Line
New England Cold Storage Warehouse
The only large Warehouse in Maine
Ideal Storage for all Perishable Produce
PORTLAND MAINE

Special taxes on chain food stores are actually sales taxes on the first essential of life
THE GREAT ATLANTIC & PACIFIC TEA CO.

Telephone Syracuse 2-0976
Members Gouverneur N. Y. Cheese Board - Chicago Merc. Exch.
LESLIE A. VIRKLER
New York State Cheese Assemblers
Fred C. Reynolds, Sales Manager
419 Fulton St. SYRACUSE, N. Y.
N. Y. State Washed Curd & State Brand Cheese

Locker Plants for Frozen Foods—Their Engineering and Economic Aspects

By Fred J. Beard, Assistant Professor in Charge of Meats,
Iowa State College, Ames, Iowa

WHAT are cold storage locker plants? What is a cold storage or freezer locker? To many of you their meaning is well understood and to those in the Middlewest and Northwest they are household terms.

As defined by the last general assembly of the Iowa State legislature, cold storage locker plants are for the separate and distinct purpose of preserving foods by the freezing process, operated in such a manner as to retain the natural flavor and quality of the product.

The earlier established plants had as their purpose the freezing and storing of meats for the farmer. The widely used method of preserving meat by home curing and canning did not always meet with satisfactory results. The freezing method was offered as a supplement to the methods already in use rather than as a substitute for them.

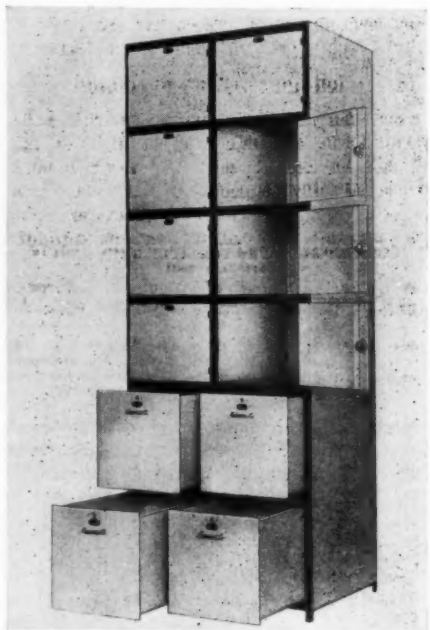
The public had long held a prejudice against the use of frozen meat but farmers did not seem to share in this. On the other hand they preferred frozen meat to much of their own home cured or canned products. Furthermore, and most of all, the rural family appreciated the relief from the drudgery of butchering, lard making and curing.

The popularity of freezer plants in the North Central states is not a mere coincidence. Probably no other area of like size has put as much time teaching the rural population how to preserve meat for home use. These people are meat minded and feel it their duty to put away in the winter months a large supply of meat for home use even though the product was not always the most tasty. Therein lies the reason for the phenomenal growth of cold storage locker plants in certain sections of the country.

1932 Saw First Iowa Installation

The first plant in Iowa was built in 1932. In 1936 there were in the state about 50 plants, and during May of that year was held the first meeting of cold storage operators. Representatives from 35 plants attended. This meeting was given rather extensive state publicity in farm papers and over the radio, which seemed to direct considerable attention toward freezer storage. Following that meeting, the idea spread very rapidly and plants began to spring up everywhere, with remarkable growth during the last two or three years as shown by the fact that at present more than 350 plants are in operation with new ones opening every month.

Any business that has such phenomenal growth naturally attracts attention and with it considerable skepticism as to its soundness from a financial standpoint. No one was found who questioned the soundness of the idea, but many doubted the support to be had from the principal beneficiaries—the farm and townspeople. The fact that in those plants under operation for at least one season with practically all lockers rented, bespeaks the support of the public as far as Iowa is concerned.



The cold storage locker business however is not a gold mine. On the other hand it is beset with many pitfalls as was evidenced by those troubled operators who attended that first meeting. Troubled because they understood little or nothing of the response or behavior of food products to aging, freezing and storage in the different temperatures.

Many Problems of Operation

The experience of nearly every operator was that everything went well at first but soon molds began to grow on the meat, odors were noticed and meat began to spoil. He knew the solutions to none of these problems and obviously he did not know how to prevent them. In many cases, I am sure that had the complexities of the business been cited, fewer plants would have been constructed during the earlier years in our state.

The amazing thing to me is the tolerance displayed by patrons when operators had the misfortune to loss some of the product. The people wanted the service and in some instances maintained their allegiance to the idea with the hope that it would be made to work successfully. Such were the experiences of some of the operators and patrons whom I choose to refer to as having pioneered the cold storage locker industry.

A modern plant consists of four main compartments, each with a specific use.

(1) A chill and aging room is where the meat is cooled and aged or ripened before it is cut into the various pieces and frozen. Pork is aged 48 to 36 hours. The ripening time for beef is determined very largely by age and degree of fatness. Beef that is completely covered with fat may be aged for three weeks or longer while that with little fat covering will ripen in much shorter time. Lambs respond to aging much like beef. The temperature for aging meat is 34 to 37 deg. F.

(2) The processing room is the work shop where all meat is cut and wrapped in convenient size packages. It is highly desirable to use a moisture proof wrapper although it is not always used in general practice. Pork sausage, hamburger, preparation of fat for the lard kettle, and other work is also performed in here. It is preferable to operate this room with a temperature of 35 to 40 deg. F. but a number of plants do not attempt to refrigerate their cutting rooms because of the discomfort to employees working in cold temperatures.

(3) The freezer is used almost exclusively for quick freezing the product. The refrigerating coils are installed so as to form shelves. These are covered with metal or wood lattice frames to prevent the packages coming in contact with them. A temperature of minus 10 deg. F. will freeze the product solid in eight to 10 hours.

(4) The locker is equipped with metal lockers each about 15 inches high, 20 inches wide and 30 inches long, equipped with a built-in lock on the door. The lockers are stacked five high and placed in tiers with aisleways between each double tier. This room should be maintained at a temperature not to exceed plus 15 deg. F.

A Packing House In Miniature

It is necessary, in a complete modern plant, to have a room for receiving product, for render-

ing lard, smoking meat, etc., a supply and machinery room, an office, and a reception room.

A plant furnishing a full line of service to the patrons is in reality a small packing house. Animals are slaughtered, meat chilled, aged, cut, packaged, marked, frozen and placed in the patron's locker. It is equipped to cure and smoke meat, make sausage, hamburger, render lard, prepare and freeze fruits and vegetables.

While very few plants now offer every type of service it is generally accepted that a rather generous variety of service is essential to economy of operation.

Fundamentally, a cold storage locker operator has two things to sell—one is manual service, the other is refrigeration. The largest item of cost in equipping a locker plant is that of an efficient refrigerating machine together with pipes and coils.

Found on the market today are a number of very reliable machines of a size suitable to handle any refrigerating job within a locker plant. The size of machine needed is determined by such items as the number of lockers, area to be refrigerated, temperature to be maintained and the quantity and nature of product to be chilled and frozen.

The prevailing refrigerant used in locker plants is ammonia although other refrigerants are used, especially in some of the smaller plants. An expensive error was committed in a number of cases where the plant was equipped with a refrigerating machine too small to handle peak loads. On the other hand, I have in mind two plants with refrigerators over-machined. It is recommended by most manufacturers that machines should normally operate 12 to 14 hours and with a maximum operating time not to exceed 18 hours per day.

Proper Refrigerating Equipment Vital

The refrigerating load is known to vary widely with the season. Furthermore, the load varies between days of a given week. The largest single day's business is usually transacted on Saturday and in some cases the machines are unable to retain the temperature even near what it should be.

In order to avoid wide variations in temperature and for the sake of economy some refrigerating engineers are now recommending two smaller-sized machines to take the place of the one large compressor. It is expected that one machine would handle the load during much of the winter season, thereby effecting a saving. Beside some economy in operation, two machines offer a distinct advantage in case one of them should break down.

The temperature in the different compartments of a cold storage locker plant and the constancy of that temperature depends very greatly upon the efficiency of the insulation. Experience has shown that saprophytic growth, micro-organic action, as well as chemical changes are subject to control by temperature—thus the importance of a well insulated cold storage plant. The materials used for insulation are of many kinds ranging from cork board to white pine shavings.

Importance of Correct Insulation

The relative cost is not necessarily a guide as to the suitability of the material for insulation. Furthermore, the fact that certain materials are shown to have high insulating properties should not be interpreted as highly desirable for cold storage plants.

Plant managers have reported increasing refrigerating costs and in some of these cases investigation has disclosed marked deterioration of the insulation or a material loss of the insulating properties. Improper installation is another contributing factor to early deterioration, especially where condensation occurs in the walls.

Inspection of a few plants with different types of construction will convince one that there is no substitute for experience and there is no economy in a cheaply constructed building. Qualified architects and engineers are high priced as compared to the ordinary building contractors and, unless the investor is familiar with specifications for this purpose, he will exercise good judgment in consulting someone who is experienced in designing and constructing cold storage buildings.

Estimates of Costs

The total investments in land, buildings and equipment vary so widely that average costs quoted should be interpreted as only rough estimates. However, a few figures obtained from a survey of Iowa plants may convey some idea as to costs. Of the plants operated in new buildings the per locker costs for 200 to 300 locker capacity was $31.00; 300 to 400 lockers, $27.50; 400 to 500 lockers, $22.50 and over 500 locker plants the cost was $24.80.

In new buildings associated with other business the cost was respectively $28.53; $25.40; $21.20 and $29.09. Where the plants were established in old buildings the cost ranged two to five dollars per locker less than in new buildings. It was indicated from this survey that the most economical investment was found in the 450 locker plants. This, however, is larger than the average size plant in our territory, which according to available information, has only about 300 lockers.

Actual information concerning the operating costs are difficult to obtain due to the newness of the business, lack of a complete cost accounting system and the manner of pro-rating costs in those plants associated with other businesses. The greatest variation was found in such items as labor, power, supplies and depreciation.

It was shown, however, that operating costs were definitely lower where the locker plant was operated in connection with another business such as a creamery, ice manufacture and ice cream plants. The operating cost ranged from $7.50 to $12.00 per locker.

The problem of a cold storage locker plant investment can be roughly analyzed as follows: Cost of a 300 locker plant fully equipped and ready for operation, $30.00 per locker; amortization period 12 years or yearly cost of $3.00 per locker. Annual operating costs $12.00—making a total of $15.00 per locker. On the basis of $10.00 annual rental per locker and with 250 rented, income is $8.35 per locker; handling 500 pounds of meat, average charge of two cents per pound is $10.00 or $8.37 per locker; total revenue $16.70 or slightly above the costs. **Analysis of the operating costs and possibilities of additional revenue** shed some light on how the margin of profit may be increased.

SAFETY!
No Glue!

DISPLAY

and: STRENGTH!

The Key to Egg-Profits:
AVOID BREAKAGE,
Use the STRONG carton.

Write the Manufacturer:
EggSafety CARTON CORPORATION
155 East 44th Street
New York City

PROGRESS B. A. S.
(BUTTER AROMA SUPERIOR)
An Improver for All Dairy Products costs less than 4 cents per 100 lbs.
Generous Sample on Request
Cottage Cheese Dressing — Buttermilk
Full Cream Cheese — Ice Cream Mix
Sour Cream — Chocolate Milk
Progress Food Specialties
2500 Lawrence Ave. Chicago, Illinois
Select Territory Open For Jobbers and Distributors

MORPAC
BUTTER PACKAGING MACHINES
For Economy and Better Packages
THE MORRIS PACKAGING EQUIPMENT COMPANY
378 Westwood Ave. TOLEDO, OHIO

C. G. HEYD & Co.
PHILADELPHIA, PA.
• BUTTER •

Chief Sources of Revenue

The major sources of revenue at present from the locker business are rentals from the lockers and charges made for the different manual services. The prevailing price for lockers is $10.00 per year or $1.00 per month for the so-called standard size lockers. Plants using two sizes of lockers quote prices for each size. Some of the managers feel the need for a smaller-size locker to meet the needs of those in cities and towns who would maintain a small but rather constant supply of products. The economy of this is challenged but the idea has much support in certain locations.

The modern plant is equipped to furnish all services incidental to the storage of meat. Every plant however does not perform all of these services. A complete service would include the following items with the customary charge based on one pound:

1. Cutting, wrapping and freezing meats—1 cent.
2. Grinding meats—1 cent.
3. Rendering lard—2 cents.
4. Curing and smoking meat—3 cents.
5. Wrapping or glazing fish—2 cents.
6. Freezing fruits and vegetables—2 cents per quart.

Charges for dressing of animals:

Cattle—$1.50 to $2.50
Hogs—$1.00 to $2.00
Lambs—$0.50 to $1.00
Poultry—$1.00 per dozen
Ducks—$2.50 per dozen
Geese—$3.50 per dozen
Turkeys—$4.00 per dozen

The matter of processing fruits and vegetables is being added to the list of services but with considerable caution and wisely so in my opinion.

The proper handling of these plant-food materials is the most technical and, therefore, the most difficult task which the operator has thus far undertaken. Only a few plants are equipped with personnel and facilities for the proper handling of fruits and vegetables. Most of these products found in lockers today were processed by the patron, then brought to the locker to be frozen and stored.

Other Possible Services

This by no means exhausts the possibilities for service, in fact it does not include all that is offered at the present time such as preparation of different types of sausages, meat loaf, baked ham, etc.

In addition to locker rentals and service charges other sources of income are for storage of fresh fruits and vegetables, fresh meat, frozen foods, beverages, etc.

While plants are actually engaged in these practices, mention of these points is intended only to emphasize the elasticity of the enterprise and suggest possibilities by which the business can be made profitable.

The plants can be made convenient distributing centers for commercially prepared frozen foods. In fact, the Iowa cold storage locker association is now affiliated in this capacity with a large Western frozen fruit and vegetable concern. The degree to which this business will expand its service depends in a large measure upon regulations imposed upon the so-called cold storage plant.

Regulatory Legislation Trends

The first move in the direction of circumscribing the locker business was made by the last General Assembly of the State of Iowa. I should like to read three sections of that bill. It was an act to provide for the defining and licensing of refrigerated locker plants. "Refrigerated locker plants" and sharp freezers are defined.

"SECTION 5. *Storing of impure food.* No article of food shall be stored in any refrigerated locker unless it is in proper condition for storage and meets all the requirements of the pure food and food sanitaton laws and such rules as may be established by the department of the sanitary preparation of food products which are to be stored.

"SECTION 7. *Foods not intended for human consumption.* Goods not intended for human consumption shall not be stored in refrigerated locker plants except such items of animal or vegetable matter which may have been inspected and approved by the United States Government.

"SECTION 8. *Food must be sharp frozen before storage.* All food must be sharp frozen before it shall be placed in a refrigerated locker, and shall be kept at a temperature of 15 deg. F. or less during the period it is kept therein."

It is obvious that the welfare of the patron is being guarded, while other sections of the bill are designed to protect the plant owner.

Important Operative Problems

Any discussion of locker plants which failed to include certain operative problems would surely be incomplete. In most instances the operator's errors are the patron's losses. I should like to comment briefly on a few of the operators' problems which concern likewise the patron.

One of his chief problems involves the proper wrapping of meats to prevent deterioration.

A paper or wrapper is needed which will prevent (1) dehydration, (2) formation of rancidity, (3) development of foreign odors, (5) freezer burns and (6) prevent the soiling of the meat.

The paper should be resistant to tear or puncture when wet or at low temperatures and possess at least one surface upon which can be legibly stamped the identification of the content in the package. It must, also, be easily applied as a wrapper. Some insist it be economical in price. A paper with these properties must be vapor-proof and of light weight so as to form a seal at the folds when reasonable care is exercised in making the wrap.

Of 15 different types, weights and grades of paper tested recently for a period of 15 weeks in our laboratory, only three could be classed as vapor-proof with one thickness as a covering over the meat. Six other wrappers allowed a shrinkage which ranged from 1.86 per cent to 2.86 per cent. The greatest shrinkage was 4.51 per cent. It should be pointed out that the amount of shrinkage has no significance in this case. The test was conducted on a homogenous sample of ground lean beef wrapped in one pound packages of similar cylindrical shape. The sheets of paper were cut to the same size and extended 1¼ times around the meat. The paper was carefully folded at the ends and a string tightly drawn around the package. The storage temperature was 0 deg. F.

Reference to this test was made only to emphasize the sincere interest that is being taken by manufacturers in finding a paper that satisfies the requirements under which it is to be used.

The second problem I wish to mention is that of sanitation. It is imperative that meat blocks, tables, meat hooks, tools and utensils receive frequent thorough cleaning. Floors in the chill room should be kept dry to avoid development of odors and mold. The operator should carefully inspect all incoming carcasses as to their sanitary condition and fitness for food. Eventually the matter of inspection will likely be delegated to specially-qualified officials, but in the meantime the operator must exercise careful control over the product coming into the plant.

The tendency for the patrons to follow the old seasonal system of slaughter and storing meat offers a real problem for some. It often over-taxes the capacity of the chill room and freezer, rushes the meat cutting and processing with frequent mistakes in labeling and otherwise identifying packages. This can be overcome in a large measure by proper instruction to the farmers.

Full Knowledge Essential

To cope successfully with these and the many other problems it is essential that the operator know the characteristics of the foodstuffs and be fully informed in regard to their proper selection, preparation, freezing and preservation. The consumer must be informed of the changes that occur in defrosted foods, that the cooking and freezing treatment of vegetables have made them more perishable when removed from the freezer and thawed, that once thawed the food should not be returned to the freezer; that frozen food is fit for consumption for a reasonable time and then only if kept under refrigeration until prepared. A thorough understanding of these important facts should be had by all consumers and the duty of advising the consumer falls very largely to the manager and operator.

Frozen foods are here to stay, for the old prejudices against them are definitely broken. The cold storage locker plants have contributed more than any other force to popularize them. These plants by their efficient and far-sighted management can develop for themselves an indispensable position in this new method of food preservation and distribution. They are fulfilling a need not supplied by any other business. Therefore, as cold storage locker plants succeed in their enterprise they contribute to the prosperity of other frozen food agencies—not jeopardize them.

VERMONT DAIRY CONFERENCE

The Annual Conference of Dairy Plant Operators and Milk Distributors, and the concurrent 18th Annual Meeting of the Vermont Dairy Plant Operators and Managers Association, are to be held at Fleming Museum, Colchester Ave., Burlington, Vt., on Wednesday and Thursday of this week.

A full report of the proceedings and the texts of several of the more important addresses will be presented in later issues of the REVIEW.

Tops at Baseball

Return Game Here Won 4 to 3 by American Seal-Kap Team Against the Abbots Dairies Aggregation

In a late September ball-game marked by brilliant playing and many thrills the fast American Seal-Kap soft-ball team for the second time took into camp Abbotts Dairies' team from Philadelphia by the close score of 4 to 3. While the "Kappers" won the game, the milkmen made a most creditable showing and lost due entirely to one untimely error.

Until the fourth inning the Abbotts milkmen led with a score of 2 to 0, with one well-earned run and a smashing homer. In the last half of the 6th the Seal-Kap team scored one run leaving two men on. Then came the deciding moment and surprise of the day. A smashing drive to deep right that should have been easily fielded was muffed and a home run was scored on an error in addition to bringing in the two men on bases. This made the score 4 to 2 in favor of Seal-Kaps when the inning closed.

In the 9th, last time at bat, the Abbotts team scored one more run which made the final score of the game 4 to 3. Both aggregations showed excellent team work and splendid fielding. Hitting was about on a par for both and the game as a whole demonstrated two evenly matched teams.

Large Group in Attendance

In addition to the ball game there was also a social side to the occasion. Over one hundred members of the Abbotts organization came up in special railroad cars. Included among the Philadelphia rooters were many executives and their wives. Arriving at the Pennsylvania station the visitors and team were met by a delegation from the Seal-Kap organization and in chartered buses they were escorted to the ball park on Long Island. Approximately 600 members of both organizations cheered for their respective teams. Officials and executives of both companies mingled in a most democratic and fraternal spirit with one another and their employees. Sociability and good fellowship were the prevailing keynotes during the ball game and festivities that followed. And the likable mascot, Walter Chambers, of the Abbotts' ball team must not be overlooked. This youngster, a one-legged colored boy, endeared himself to all by his excellent manners and loyalty to the Philadelphia team.

Among the executives of both companies who attended the day's activities were E. K. Schwartz of Abbotts, D. A. Mackin, president of the Seal-Kap Corporation, D. M. Umsted, George Barger, U. U. Trout, "Jim" Tomlinson, John O'Brien, John Mazzy, "Rex" Shoemaker, "Charlie" Doe, Wilbur Bullard, "Tom" Murray, T. H. Laing, Jesse Werden, and Gordon Knapp.

Dinner at the Fair the Climax

After the ball game everyone proceeded to the World's Fair where hunger and thirst was amply appeased at the Picadilly Circus. While at the festal board brief informal talks were made by S. K. Schwartz of Abbotts Dairies, D. A. Mackin of the Seal-Kap Corporation and Gordon Knapp, also of the latter organization. After the dinner various groups dispersed to view the attractions of the Fair. Many of the visitors took especial interest in the Borden's, Sealtest, and Electrified Farm exhibits, where dairying is featured. At 11:30 P.M. the Philadelphia aggregation left the Pennsylvania station for home.

This ball game and its side-line activities served to exemplify the good-will that exists not only between many employers and employees but also the friendly relationship that prevails between dairy and supply firms within the allied dairy industries. Through rivalry in sport a closer bond of friendship is cemented between these participating groups.

WISCONSIN CONVENTION PLANS

State Milk Dealers and Ice Cream Makers To Meet December 12-14

The fourth annual joint convention of the Wisconsin Association of Ice Cream Manufacturers and Wisconsin Milk Dealers Association will be held at the Hotel Schroeder, Milwaukee, December 12, 13 and 14. Assisting in convention plans, as in previous years, are the Badger Flyers, the suppliers' and salesmen's organization. Convention plans were discussed at a meeting of the Board of Directors of the ice cream and milk organizations and officers of the Badger Flyers, which was held in Milwaukee, October 10.

The General Session of the convention will open at 1:30 P.M. on December 12. Special session of the ice cream manufacturers will be held on the forenoon of the 13th, with the milk dealers' session following on the afternoon of that day. Thursday morning will be devoted to the business meetings of the two organizations followed by a luncheon at noon, which will be addressed by a speaker of recognized standing on industry problems.

George Stueber, Wausau, is president of the Wisconsin Association of Ice Cream Manufacturers, P. C. Carver, Oshkosh, Secretary. President of the Milk Dealers' Association is F. G. Plott, Green Bay; Secretary, B. A. Pratt, Wisconsin Rapids.

In addition to these officers, the program committee is made up of J. Huber Wetenhall, Milwaukee; W. A. Gifford, Racine; Hans Johnson, Milwaukee; Sam Katz, Milwaukee; H. E. Stinchfield, Minneapolis.

CHARGE STOCK SALE FRAUD

Allege Fraudulent Operations In Reinforced Paper Bottle Corp. Securities

On a charge of using the mails in the fraudulent sale of stock in the Reinforced Paper Bottle Corporation, Mrs. Lydia D. Koch, 62 years old, was arrested by federal authorities and later released on $4,000 bail early in October. According to reports Mrs. Koch was alleged to have incorporated her business at $5,000,000, and to have sold more than $1,000,000 worth of stock.

Her arrest resulted from information supplied to the office of U. S. Attorney John J. Cahill by New York State Attorney General John J. Bennett, Jr. On October 4th Attorney Bennett obtained a Supreme Court order temporarily restraning Mrs. Koch from further security sales in New York State. He charged that Mrs. Koch had defrauded investors out of more than $1,000,000 in the 16 years that she had been promoting the Reinforced Paper Bottle Corporation.

In promoting the stock he charged Mrs. Koch mentioned large impending contracts from Russian, British and Chinese corporations, and also, that the Standard Oil Company had offered fifty million dollars for patents. The attorney charged that Mrs. Koch misrepresented in statements that Alfred E. Smith, Dr. Shirley Wynne and the late William H. Wooden, former Secretary of the Treasury, were interested in her corporation.

The Safety Service Milk Bottle Corporation in New York City was mentioned in the case as being a subsidiary of Mrs. Koch's Reinforced Paper Bottle Corporation.

PROPOSE OLEO TAX REPEAL

Milwaukee, Wis.—Wisconsin Assembly has refused to withdraw from the agricultural committee a bill proposing repeal of the State's 15c per pound tax on oleomargarine.

FAIRMONT BUYS IN KANSAS

Kinsley, Kan. — Kinsley Creamery Co. has been taken over by the Fairmont Creamery Co. W. W. Milburn, former manager, will be in charge of manufacturing operations.

INTRODUCING MASUROVSKY'S MILKMETER

A New Slide Rule For the Dairy Industries

For the determination of milk-solids-not-fat and total milk solids when the lactometer reading and butter-fat contents of milk are known.

Masurovsky's Milkmeter is based on the famous formula of Dr. S. M. Babcock and on the accepted tables worked out by Drs. Farrington and Woll, recognized dairy authorities.

It is built of celluloid and comes in a sturdy paper casing with instructions of how to use. Masurovsky Milkmeter—Price $1.00 postpaid.

May be returned after 5 days' inspection and your money will be promptly refunded.

Remit with order to B. I. Masurovsky, 1826 Morris Ave., Bronx, New York.

Wants and For Sale

RATES: "Position Wanted," 50c. All other advertisements, $1.00. Limit of 50 words. More than 50 words, 2c a word additional. Keyed ads care of this publication, 15c extra. All payments strictly in advance.

POSITION WANTED—Young executive desires permanent position in South America with reliable and progressive concern. Is now employed as sales manager of fast-growing business (13 years' experience). Can furnish excellent references. Married. Two children. Box 7170, care this publication. 11-25-2

POSITION WANTED by young married man with an independent company, preferably in the northeast, that can assure permanent employment in preference to high wages. Dairy school short course; several years' experience in production, sales and field work (ice cream, butter, fluid milk). Good references and not expecting anything soft. Box 7167, care this publication. 11-25-2

POSITION WANTED—As creamery superintendent. Thirty years old with 11 years' experience. I have Pennsylvania tester's license and Pennsylvania approved inspector's license. Can produce a high quality buttermilk, cottage cheese, bottled milk, ice cream mix and freeze, sweet and sour cream. Can operate vacuum pan. Understand refrigerating and plant machinery. Pennsylvania plant preferred. Best of references. Box 7168, care this publication. 11-25-2

THERMOMETERS AND THERMOMETER REPAIRING—Send your broken stem (indicating) and recording thermometers to us. We rebuild them at lowest possible price. We also sell the most complete line of floating and pocket dairy thermometers. Write for our prices. Everything guaranteed. The Anthony Miller Thermometer Co., Hartford, Mich. 9-27-4m.p.

CONNECTION WANTED — Manufacturer's or Supply Jobber's Representative available for part-time work in Metropolitan New York Area on commission basis. Wide acquaintance with butter, egg and kindred trades. Best of references. Box 7171, care this publication. 11-25-1

POSITION WANTED by man with 15 years of experience in milk and its products. Communications invited from firms in need of an efficient man with vast experience in all grades of bottling and manufacturing plants and nearly all by-products as: sour cream, mix, hard and soft cheese, condensed and powdered milk, etc.; also sales. College graduate; A-1 references; tester's and manager's license. Box 7173, care this publication. 11-25-1

WANTED—Creamery to buy or rent. Must be New York City approved. Box 7169, care this publication. 11-25-4

WANTED — Weekly shipment of day-old Picnic Twins—uncolored and unparaffined—quote price f.o.b. factory. Address Eldorado Dairy Products, 149 7th St., Brooklyn, N. Y. 11-18-2

WANTED—Ten thousand pounds milk daily beginning January, not in fluid milk zone, to manufacture into foreign cheese on premises. Will furnish cheesemaker and additional equipment. Box 7172, care this publication. 11-25-1

FOR SALE—Pfaudler 18,000 lb. glass-lined storage tank. Price reasonable. Michigan Dairy Farms Co., Homer, Mich. 10-11-4

Famous for Quality **SODUS** Since 1894

COTTAGE CHEESE

Manufactured From Finest of Pasteurized Milk and Cream Produced Under N. Y. City Board of Health Requirements

Sodus Creamery Corporation

Wolcott N. Y. City Phone: STillwell 4-3780 New York

SELL REGENT CHEESE

A Cheese For Every Need

CREAM CHEESE | MUENSTER CHEESE
COTTAGE CHEESE | AMERICAN CHEESE
FLAKE CHEESE | BAKER CHEESE

MEYER ZAUSNER

New Holland, Lancaster Co., Pa.
New York City Office: 175 Franklin Street

Oppose Trade Agreement

(*Continued from First Page*)

rains and the large supply of supplementary feedstuffs in most areas, milk production is expected to show only about the usual seasonal decline during the next month or two.

Milk production per cow on October 1 for the country as a whole averaged for that date in all major groups of states, 12.82 pounds compared with 13.15 pounds on the same date last year. In these herds 71.9 per cent of the cows were reported milked compared with 73.1 per cent on October 1 a year ago.

The condition of dairy pastures in the United States this year showed a record decline for September. As the result of very rapid deterioration of pastures in Central and East Central States where pastures during the summer months were unusually good, together with continued dry weather in important Northeastern dairy sections and in many of the Great Plains, Rocky Mountain and Pacific Coast States, the average condition of dairy pastures in the country as a whole on October 1 was the second lowest for the date in more than 20 years.

For the country as a whole the condition of dairy pastures on October 1 averaged 58 per cent of normal compared with 78 per cent on the same date last year, and an average of 65.5 per cent for October 1 in the ten year average, 1928-37. On October 1 extreme drought prevailed in large areas of dairy production in New York and Pennsylvania, Nebraska, Kansas, Oklahoma and Texas.

CREAM CHEESE HEARINGS

Recent Standards of Identity Sessions At Washington Well Attended

Washington, D. C.—At the hearings held here by the Food and Drug Administration on Proposed Standards of Identity for Cream Cheese the week of October 2, witnesses were divided roughly into two groups. One, the larger manufacturers of advertised brands of the product who supported the government's efforts in favor of cream cheese with high butterfat and low moisture content; and the other, smaller manufacturers of bulk cream cheese who opposed the proposed standards for higher quality.

The government advocated cream cheese with fat content of 33 to 34 per cent and 55 per cent moisture. The Borden Co., Kraft-Phenix Cheese Co., Breakstone Bros. and several other large manufacturers supported the department in favor of the high standard. Government officials and many industry representatives countered arguments of those opposed to the proposed standards with the assertion that the new standard would not necessarily lead to monopoly as the smaller manufacturers enjoyed the same opportunity to make higher quality goods and could continue to manufacture a low-fat, high-moisture product as long as it would not be termed cream cheese.

Label declarations on the use of harmless gums and gelatin came in for considerable discussion. Henry A. Lepper of the Dairy Division of the Food Section of the Food and Drug Administration stated that the use of gums and gelatin would be self-regulating if cream cheese met the proposed standards in regard to fat and moisture.

Representatives of the Dupont company, with a strong scientific staff, presented a mass of testimony in favor of including sodium and calcium propionates as optional ingredients in the cream cheese standards. Hair-line distinctions were made between propionates as an arrester of mold development and as a chemical preservative.

Among the many who offered testimony at the cream cheese hearings were Donald K. Howe of the Fairmont Creamery Co., Roscoe A. Page of the Kraft-Phenix Co., Louis Josephson of Breakstone Bros., Miss Mary Dahnke, Dr. Lloyd K. Riggs, Earle Steele, Earnest C. Thompson of The Borden Co., Edward Gallahue of the A.A.A., Miss Charlotte Chatfield of the Bureau of Home Economics, Mrs. Katherine M. Ansley of the American Home Economics Association, Meyer Zausner, and Messrs. Conford, Tuttle and Taub.

December 1 was set as the date for the filing of proposed findings on the hearings.

Some Individual Group Figures

(*Continued from Page 66*)

among other things, the great opportunity for dairy producers in the expansion of the market for this item of merchandise. An important element in this is that a unit of cream, like manufactured dairy products, disposes of several times that volume of fluid milk.

"CANNED MILK: The weighted average increase by food chains of 11.8 per cent is compared with a total decrease in consumption (as reported by the U. S. Department of Agriculture) of 2.7 per cent."

The record of achievement in these phases of the latest of the intensive periodic campaigns for wider and broader milk outlets thus outlined presents an interesting picture indeed. And it becomes increasingly difficult to comprehend why such strikingly proven lessons have not long ago solidified dairy industry sentiment into an *enthusiastic demand* for sound and continuous sales promotion!

WREVIEW WANT ADS PAY

TAXPAYERS

Should check their 1939 security transactions now to determine reportable profits and losses. In many cases income tax can be CUT by taking proper action before the close of this year.

HARRY LEFKER & COMPANY
Accountants
291 Broadway New York, N. Y.